SPECTACULAR FIRST ANNIVERSARY ISSUE

# VIDEOGAMING

## & COMPUTERGAMING ILLUSTRATED

49140
AUGUST
K

ION INTERNATIONAL INC.

$2.95 IN U.S.A.
$3.25 IN CANADA

THE BOOK OF VIDEOGAME LISTS: A GUIDE TO YOUR FAVORITE GAMES

COLECO'S ADAM! POWERHOUSE COMPUTER WITH WORD PROCESSOR, PRINTER, 80K!

COMPUTER LANGUAGE MADE SIMPLE

MEET THE DEVILS OF THE DEEP

0 71896 49140 08

© 1983 Atari, Inc. All rights reserved. *Trademark of Bally Midway Mfg. Co. licensed by Namco-America, Inc. †Trademark of Sears, Roebuck and Co.

# Which player is about to score with flying colors?

## Better learn fast. Here comes Galaxian* from Atari®.

Pilot to co-pilot. Galaxian invaders are approaching your home. And they're only from Atari for use with the ATARI® 2600™, Sears Video Arcade† systems, and the ATARI 5200™ SuperSystem.

These Galaxians look, sound, and act no different than the Galaxians you've battled in the arcade. They swoop, dodge, and fire with equal cunning. So you have to know your stuff.

Like the player on the left. He's about to hit a flying yellow Flagship for 150 points. But his opponent, on the right, will score only 30 points for hitting the stationary blue Drone. Tough luck, rookie.

If you want to know even more about which Galaxians to hit, hit the stores for Galaxian.

ATARI

A Warner Communications Company.

# VIDEOGAMING
## AND COMPUTERGAMING ILLUSTRATED


Editor and Founder
***Jeff Rovin***
Executive Editor
***Tim Moriarty***
Managing Editor
***Richard Meyers***
Technical Editor
***Jim Clark***
Electronics Editor
***Lawrence Levine***
Computer Editor
***Martin Levitan***
Senior Writers
***Randy Palmer***
***E.C. Meade***

Art Director
***Bill DuBay***
Production
***The Cartoon Factory***
***Thomas Ghee, Jr.***
***Peter Neiburg***
Editorial Assistant
***Christine Whitlock***
Research Assistants
***Beth Kay***
***Leslie Rovin***
Business Consultant
***Richard Stevens***
Publisher
***Michael Schneider***

Ad Director: ***Lynne Dominick (212) 239-0855***


***Contents***

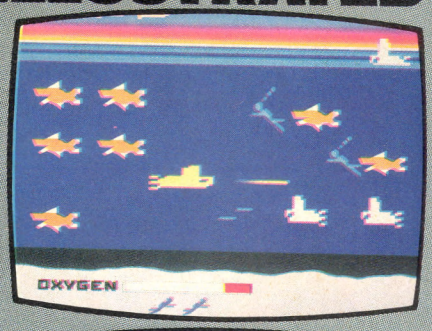

| | |
|---|---|
| *The Keyboard* | *5* |
| *Eye On* | *7* |
| *Preview* | *11* |
| *Focus On: Video Devils of the Deep* | *19* |
| *Behind the Scenes: Magnavox vs. Mattel* | *22* |
| *Conquering: Space Panic* | *25* |
| *Conquering: No Escape* | *27* |
| *Print Out* | *30* |
| *Input* | *31* |
| *Media Preview* | *33* |
| *Championship Videogaming* | *36* |
| *Conquering: Xevious* | *39* |
| *Conquering: Arcade Games* | *41* |
| *Arcadia: Hand Helds* | *46* |
| *Computereyes: Adam* | *49* |
| *Chip Ahoy* | *51* |
| *Computereyes: Hardware* | *52* |
| *RAMblings* | *57* |
| *Computereyes: BASIC* | *62* |
| *VCI Special: Book of Videogame Lists* | *67* |
| *Video Victor* | *81* |
| *You Read It Here First* | *82* |

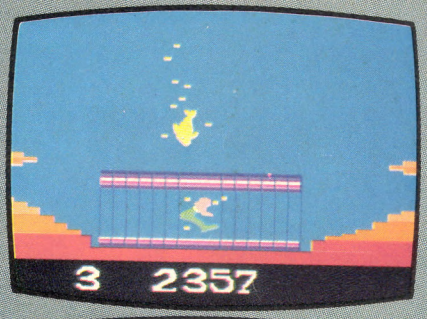


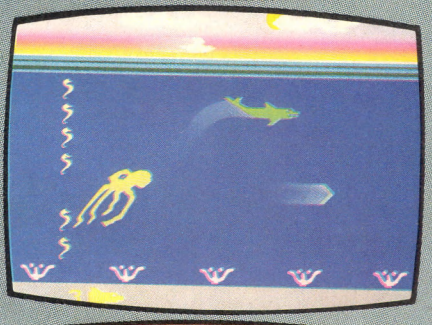
Videogaming & Computergaming Illustrated No. 8 August is published monthly by Ion International Inc., 45 W. 34th St., Room 407, New York, NY, 10001. Subscription rate: 12 issues for $28.00 and 24 issues for $52.00. Canada $36.00 and $60.00 respectively. Second-class postage is pending at New York, NY, additional entry at Sparta, Illinois.

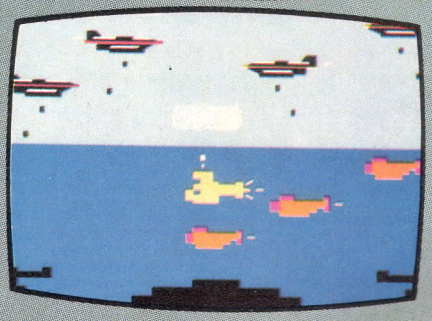

©1983 by Ion International Inc. All rights reserved. ©under Universal International and Pan American Copyright conventions. Reproduction of editorial or pictorial content in any manner is prohibited. No responsibility can be accepted for unsolicited material.


All editorial & subscription inquiries should be addressed to 45 W. 34th St., Room 407, New York, NY 10001. Agency: Cartoon Factory, Danbury, CT 06810. Advertising Representative: Lynne Dominick, 45 W. 34th St., Room 407, New York, NY, (212) 235-0899

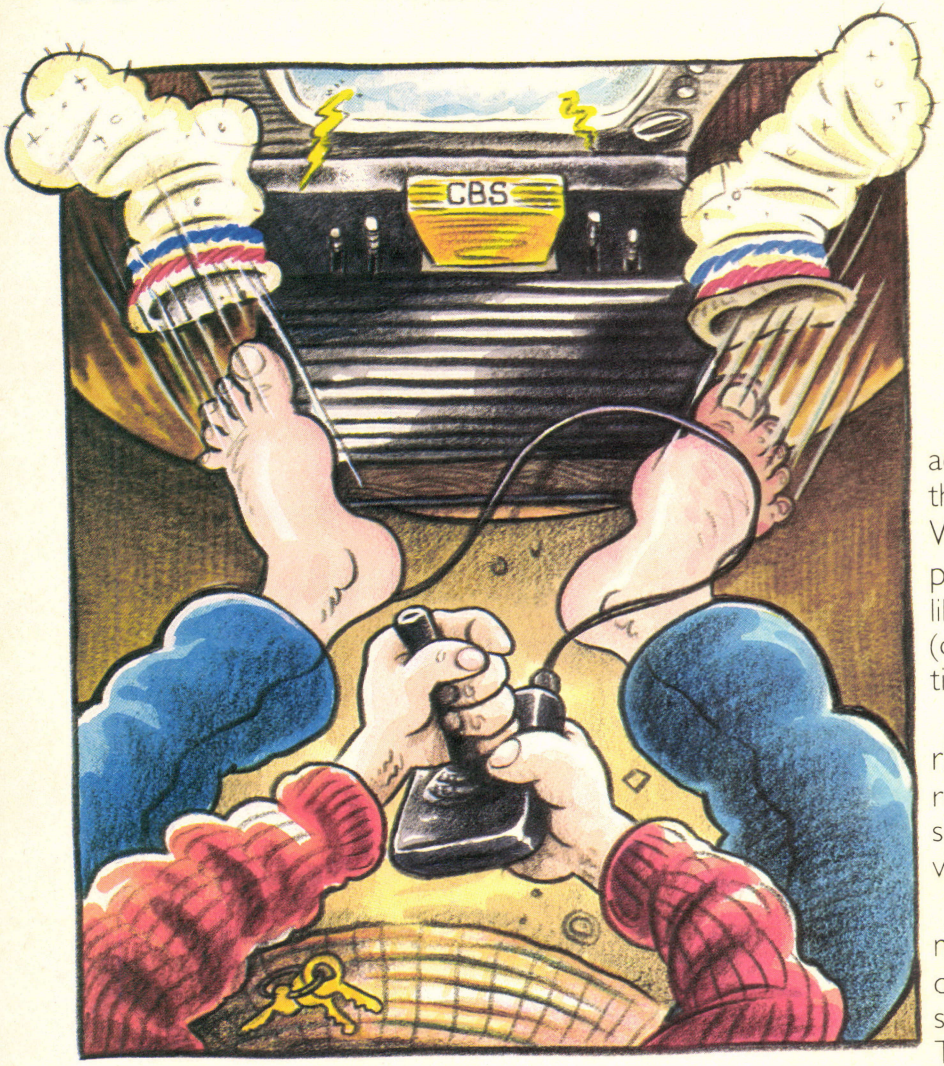



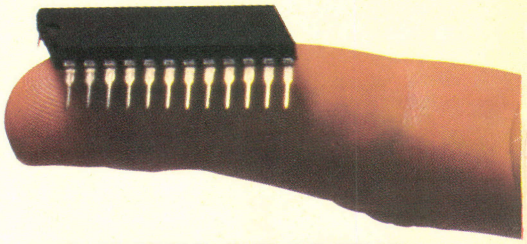





# HANG ON TO YOUR ATARI® VCS.™ THE FIRST VIDEO GAMES TO TRIPLE ITS POWER ARE ON THE WAY.



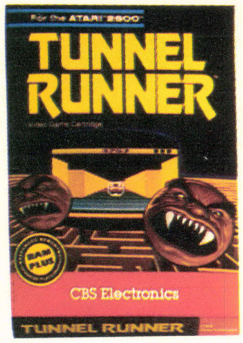
## CBS INTRODUCES RAM PLUS.™

Just like that, you're streaking across the sky at Mach 3 or running through a maze with 20 foot walls. What gives? Our new RAM PLUS™ power chip. It gives RAM PLUS games like WINGS™ and TUNNEL RUNNER™ (coming this summer) a memory 3 times as powerful as ordinary games.

That means our "3-D" graphics rival any system around. You get the realistic action, extra detail, added game screens and arcade-quality sound you want.

You're in the cockpit as WINGS matches your flying skills against an all-out cruise missile attack. Check air speed, altitude, radar, compass and fuel. Then blast away with cannons, lasers and Sidewinder missiles. The free BOOSTER-GRIP™ increases your firepower with 2 extra firing buttons! In TUNNEL RUNNER, you don't look down on the maze, you're in it! Hungry monsters close in on you. So check the map, plot your strategy and find the exit fast. Your reward? A new and tougher maze.

So if you never thought an Atari VCS game could send you flying and running for your life, hang on tight. Our first 2 RAM PLUS games are on the way.



**CBS Electronics**

Where the excitement never ends.℠

"ATARI" and "ATARI VCS" are trademarks of Atari, Inc. "WINGS," "TUNNEL RUNNER," "BOOSTER-GRIP" and "RAM PLUS" are trademarks of CBS Inc.

© 1983 CBS Inc.

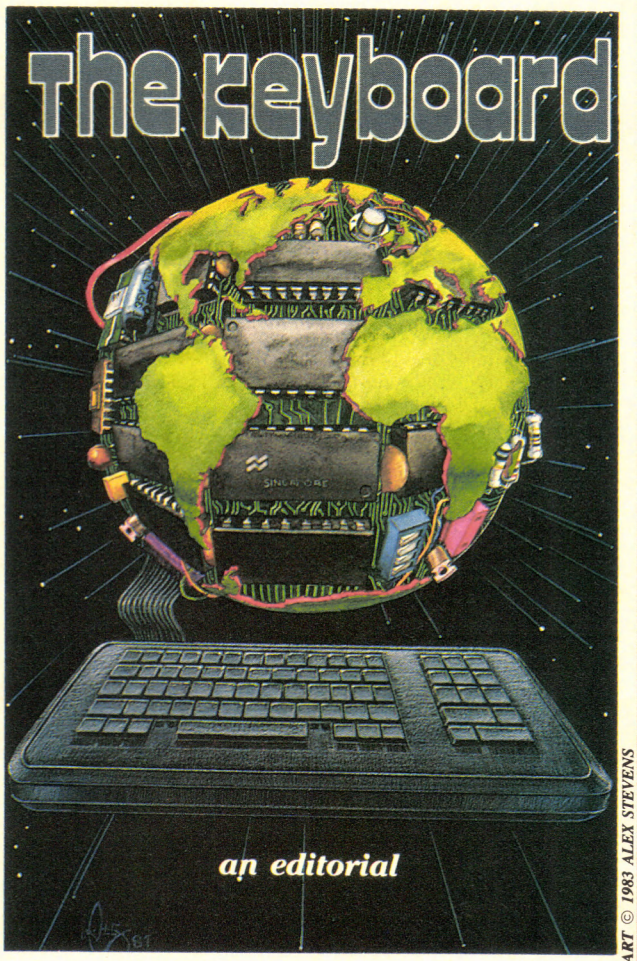
In the issue of *Variety* dated March 30, 1983, the results of a joint RCA/NBC entertainment task force were revealed. The study predicted that by 1990, paycable revenues will climb to more than sixteen billion dollars, outgrossing theatrical box office revenues by three to one. *Three to one.* Videocassette and videodisk sales were projected to grow more than ten times in the next eight years. All in all, according to the study, consumer spending for the U.S. video industry as a whole will triple by 1990, from last year's twenty five billion dollars to seventy three billion.

Taking these projections as gospel for argument's sake—and heeding the waking rumblings of the telecommunications industry—the conclusion is obvious: paycable and network television, electronic gaming, videocassettes and disks, telecommunications, and technologies of which we're not yet aware—more than ever before these are going to turn the home into *the* entertainment center for Americans. Education, banking, travel, services and industry will all undergo fundamental change. The ordeal our labor force is undergoing adjusting to the computer age (and coincidentally an age of austerity) will become even more painful.

Anxiety is the kneejerk reaction to change. Fear, resentment, anger and a stomach-lurch of helplessness are evoked in technophiles and phobes alike.

It is too easy for us to envision a nation of an alienated monied class hermetically sealed behind locked doors while the chaotic and crime-riddled streets become the province of the poor and primitive; a nation in which theaters and churches, already fiscally squeezed, languish and die; a nation in which consumers are at the mercy of the media, becoming video-hypnotized drones, susceptible to commercial and political propagandistic pitches; a nation in which communal experience and fundamental human contact are lost.

On the other hand, optimists and science fictioneers will claim that time saved in travel and labor—and the availability of the world's culture at our fingertips— will afford humankind a chance to evolve the inner being: each of us will become either an all-comprehending guru of super-spirituality or a hyper-intelligent, skin-bleached conehead.



ART © 1983 ALEX STEVENS

Regardless, one thing is certain: With a wealth of cable stations and commercial-free technologies available, we will be *less* at the mercy of government-filtered news and commercial allurements, not *more* so.

Cabin fever is an aspect of our psychological makeup that will be slow to die. Anyone with a smidgen of vigor and curiosity is not going to remain glued to his or her La-z-boy. Media-saturated as we are today, we're undergoing a fitness explosion, at least among those with the time and the will to be fit. The parks in our nation's cities are crowded to overflowing in spring in summer. Because the home will be so central to work and play, people *will* go out. Travel, restaurants, theater, concerts, and movies will become an even more valued option (although it is distressing to note that audiences today behave, with increasing frequency, as if they were in their own living rooms—a factor which ironically drives many people back to their homes).

Alienation? When telephones with video capacity, perhaps via the television, become a commonplace, vital elements of human communication, lost to blind telephones, will be regained. For better or worse, we will be able to meet face to face with tedious cousins or cherished parents three times zones distant . . . every day.

Technology often becomes the whipping boy as it worms its way ever more intimately into our lives.

*The New York Times* recently studied families in California's Silicon Valley. The researchers found troubling tendencies among computer-owning families: the father is unable to relate to imperfect mother after communicating with the perfect machine; the mother, accustomed to immediate and satisfactory response from the computer, becomes impatient with moody and unresponsive father; the daughter or son, feeling inadequate in sports, academics or the arts, hides in a computer world they can control while social and interactive skills languish.

Cultural advances *do* create new barriers. But each of us creates, and is responsible for, our own world within the larger sphere we are, in many ways, powerless to change. In a free society, society does not prevent individuals from embracing, listening, nurturing, caring. Only the individual, choice by choice, day by day, can do that. ***—Tim Moriarty***

## OVER 250 DIFFERENT CHALLENGE LEVELS.

What does Spyrus the Deathless, Timelord of Chaos, have against you? An armada of deadly Time Ships laden with nucleonic killers...lethal annihilators...anti-matter mines...and the clock.

Your only defense is the laser cannon mounted on your own Time Machine. And, of course, your own cunning and speed. Destroy one flight of the Timelord's Ships and another follows. This time with faster, smarter and deadlier devices to trap you. Wave after wave, with up to 256 levels of increasing challenge. You may get past 10, 20 or even 50 levels–but 256?

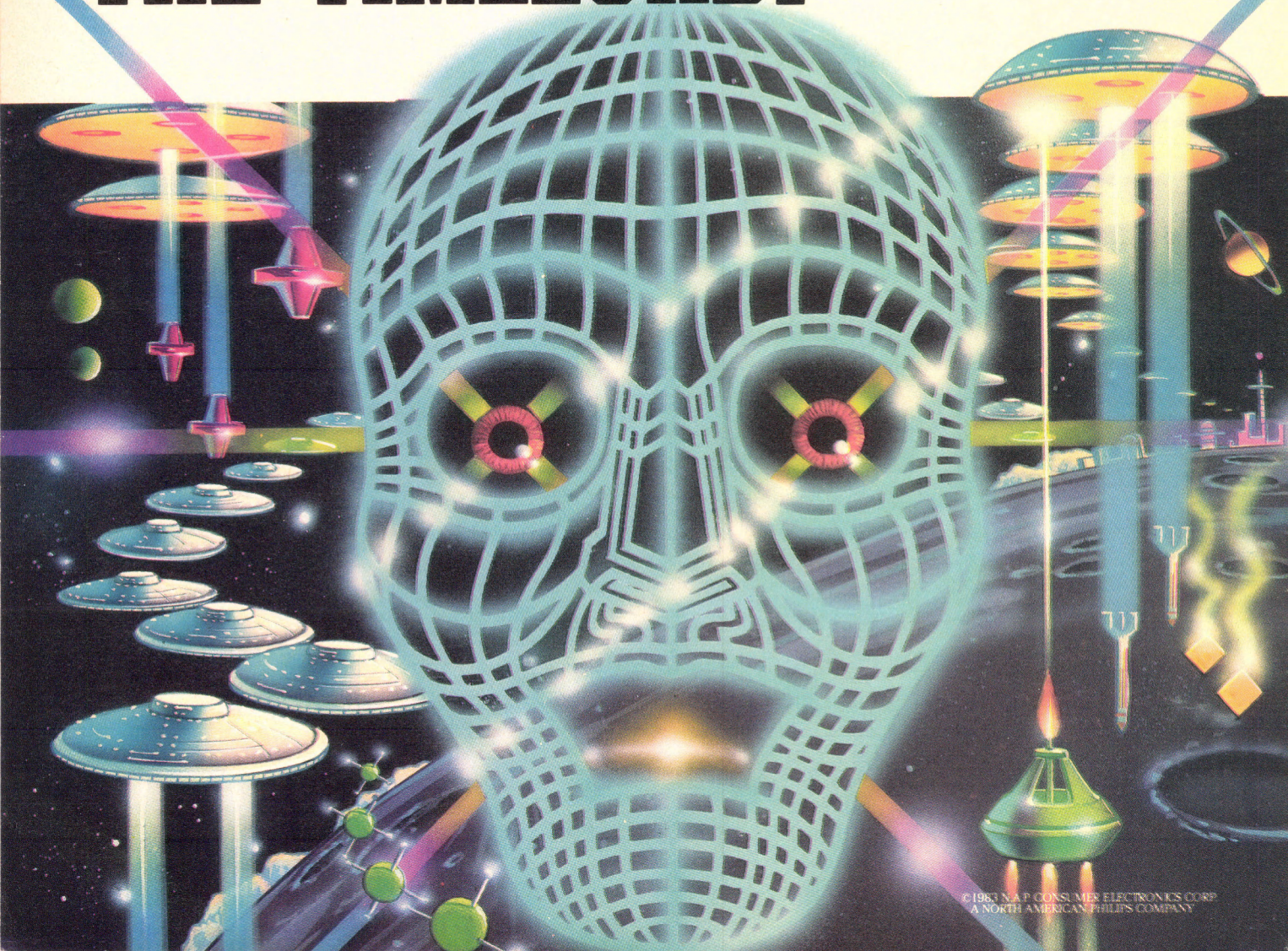
For two or more players, Attack of the Timelord features high digital scoring with memory *plus* exciting sound effects when played through the Voice of Odyssey®!

Attack of the Timelord. A challenge you can't turn back.

**ODYSSEY**

**Over 50 games available.**

# YOU CAN'T TURN BACK THE TIMELORD.



©1983 N.A.P. CONSUMER ELECTRONICS CORP.
A NORTH AMERICAN PHILIPS COMPANY

## LET THE GAMES BEGIN

'Tis the season to be jolly . . . for the videogame enthusiast. A flurry of activity is expected for each major system with the exception of Odyssey.

However, if some of these games do not appear in your local store by the time the leaves start to change, remember that release dates, like an elected official's mind, are extremely subject to change.

**Atari 2600**

Imagic's entries for the 2600 include *Fathom, Solar Storm,* and *Moonsweeper.*

*Fathom.* Designed by Rob Fulop, who brought you *Demon Attack, Fathom* is fully described in this issue's *Video Devils of the Deep.*

*Moonsweeper.* Pilot your spaceship through deep space and then over the surface of a desolate planet to rescue marooned miners plagued by aliens. Dual screens

*Solar Storm.* Dual screens once again: as if blasting hostile aliens weren't enough, the Big Bang has caused meteors and Sizzloids to rain down on your planet.

No details, but a compelling title, were available for the fourth Imagic game: *Tarantula.*

Upcoming from Activision:

*Decathalon.* All ten Olympic events are yours for the asking.

*Crackpot.* A *Kaboom*-ish game in which the player must drop pots to crown crawling bugs.

*Dreadnaught.* A space battle game.

From the M Network: *Loco-Motion* (a mad railroad scramble) and *Computer Revenge* (sounds interesting: defend the human race against an alien missile barrage controlled by a *perfect* computer).

From Atari, four titles but few details: *Krull* (adapted from the Peter Yates fantasy film), *Waterworld, Gravitar,* and the arcade hit *Pole Position.*

And finally from 20th Century Fox Games: *Porky's.* From a number of possible scenarios, Fox has chosen the game's object to be the annihilation of Porky's bar.

**Atari 5200**

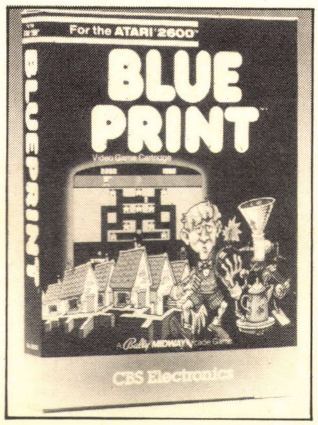
Atari's own entries for their "super system" are familiar and long awaited: *Vanguard, Ms. Pac-Man, Jungle Hunt* and *Baseball.*

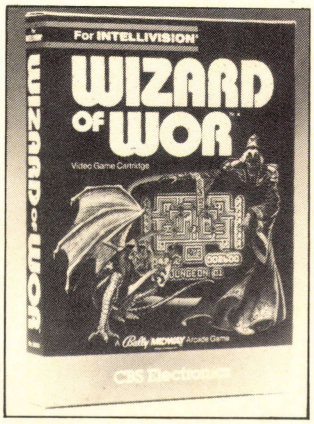
And this, from Tigervision: *Springer* is a rabbit who, in trying to reach the sun by jumping from cloud to cloud, must avoid dragons and fire balls.

Sounds self-defeating.

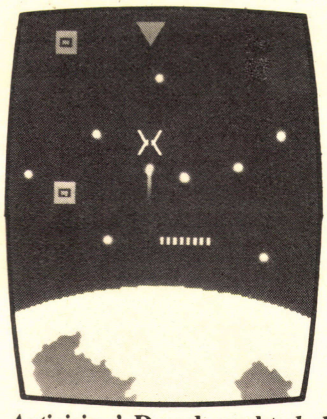
CBS Electronics has turned its attention to the 5200 with five titles, including the arcade hits *Wizard of Wor* (the maze shoot-out) and *Gorf* (four-tiered space battle).

Other CBS titles are *Blueprint* (a memory game—construct a weapon that will save your paramour). *Mountain King* (a quest for diamonds and treasure in a mountain labyrinth) and *K-Razy Shoot-Out* (the maze game that, in its Atari 400/800 format, won *Electronic Games'* 1982 Computer Game of the Year Award).




*Save your lady love from a blob in CBS'* **Blueprint** *(left) and save yourself from the* **The Wizard of Wor.**



*Activision's* **Dreadnaught** *challenges the player's piloting skills and nerves in battle.*

**Intellivision**

Imagic's *Fathom* and *Moonsweeper* will be available in Intellivision format by mid-fall.

Mattel's own summer entries have been covered in previous issues. They include the arcade hit *BurgerTime,* fantasy questing games *Mystic Castle* and *Advanced Dungeons and Dragons: Treasure of Tarmin* (multiple screens, first person format), the above mentioned *Loco-Motion, Buzz Bombers* (repel those killer bees!), *Space Shuttle* (Intellivoice), *Major League All-Star Baseball* (new and improved), *MotoCross and Pinball.*

CBS Electronics summer releases for Intellivision include *Wizard of Wor, Gorf, Blueprint, Solar Fox* (the grid game) and *Omega Race* (Droid Ships, Vapor Missiles, and a whirling Death Ship).

**ColecoVision**

Coleco will be applying their stunning graphics to such arcade hits as *Buck Rogers* (trench warfare in space), *Time Pilot* (air battles throughout the ages and into the future) and *Subroc* (the long-awaited 3D air-sea battle game has game-of-the-year potential).

Players with Coleco's new Super Action Controllers will have *Football* and *Rocky* boxing action to keep their digits dancing.

In *Victory,* the player controls a Battlestar. Spinning and firing in all directions, the player must defend his/her planet against blasting and paratrooper—dropping aliens. Player weapons include lasers, shields, and a Doomsday Device.

## RIVER OF STICKS

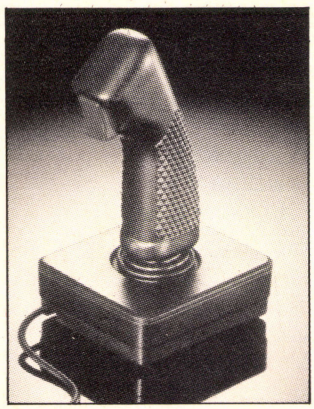
To complement the new wave of games into the market, established corporations and small entrepreneurial concerns are maintaining a steady current of super joysticks and other hardware into the market.

• The Triga Command joystick from Electra Concepts of Bohemia, New York features a contoured diamond textured grip (designed by an aerospace pilot), index finger fire button, and heavyweight base.

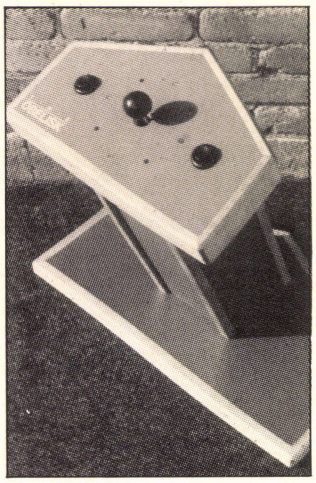
All the new joysticks are designed with left-handed players in mind, and Triga Command is no exception. Our reviewers found this stick to be exceptionally fluid and comfortable to use. Compatible with the Atari 2600, Atari computers, Commodore computers and ColecoVision.

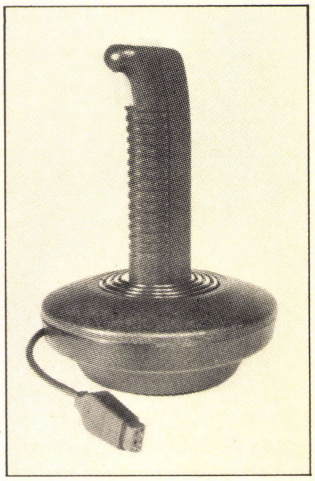
• Newport Controls of Los Gatos California has two new sticks available, the Prostick II for all the abovementioned systems except ColecoVision and the Prostick III for ColecoVision.

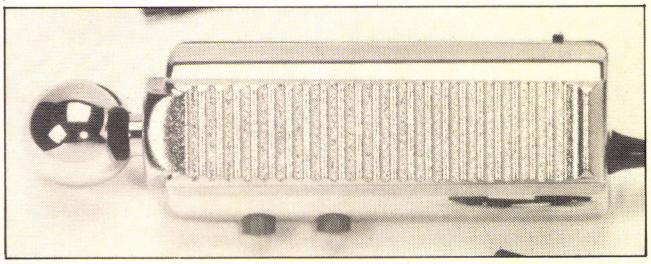
With left handed players, and index finger in mind, the Prostick II has two firing buttons at the base while the Prostick III has a firing bar. Additionally, both sticks carry a unique and useful feature: eight way and four way plate settings. The four way setting helps the player take the corners in maze games with ease. The Prostick II sells for $24.95, the Prostick III for $29.95.



*Electra Concepts' Triga Command joystick.*







*Top left, the Obelisk. Top right, Championship Electronics' stick. Above, Zircon's Z-Stick.*

• Also for the Atari/Commodore circuit is Amiga's Power-Stick. Amiga boasts that their one and a half inch handle and unique switching mechanism provides true eight-way response. The Power-Stick sells for a low $9.95

Amiga is the manufacturer of the Power System, a RAM-enhanced cassette loading game system for the Atari 2600.

• Championship Electronics of San Francisco has introduced the Super Champ Joystick for Atari machines, Commodore and Texas Instruments (with adaptor) computers, and ColecoVision. The Super Champ has two firebuttons, your choice of thumb or index finger, and a retractable cord. The button depression is very limited, be warned.

• Certainly the prize for the most unique joystick design has to go to Zircon International of Campbell California for their Z-Stick. Compatible with Atari, Coleco, Texas Instruments and Commodore machines, the chrome-plated Z-Stick features functions for maze control (slick cornering), speed control (can slow gameplay fifty percent) and Autofire (rapid fire). The Z-Stick sells for $29.95.

Zircon's Track-Ball controller, selling for under $50, also has an autofire function in its twin fire buttons, which are mounted on a recessed ledge to keep the firing hand from tangling with the ball-spinning hand.

• A product designed to give game designers nightmares is The Blaster from Questar Controls Inc. of Chehalis, Washington. The Blaster plugs in between the game console and the joystick, converting single shot firing into machine gun rapid fire, up to twenty shots per second. A speed control mechanism must be dialed to match the game's software, and the game code must allow for tampering.

• Going from the sublime to the ridiculous and beyond, the videogame elite will want to take a gander at The Obelisk, "furniture for the serious home video player." Constructed of hardwoods and formica, the Obelisk is a control console including joystick, fire buttons (instructions included for left or right handed interchange), and an optional rapid fire button.

From J.D. Home Associates of Bozeman, Montana, and compatible with Atari, Commodore and Coleco units, the one player Obelisk sells for $89.95, the two player $124.95.

*Questar Controls' Blaster: machine gun madness.*

## LEMON AID

Players who can spring for a formica videogame console may not be interested in this item; the videogame manufacturers may want to shut their eyes.

The market for used videogame cartridges is growing and a number of businesses have opened to fill that need. Neil Levin, a confirmed videogame enthusiast, saw the writing on the wall last year and promptly converted his used bookstore to that purpose. Now his Forest Hills Used Videogame Cartridges is the largest in the country.

"We are not in the trading business." says Levin. "We are in the buying and selling business. We test every cartridge that comes in, and every cartridge that goes out." Levin sells games, depending on demand, for anywhere from one to thirteen dollars. He also sells used 2600 units and ColecoVision units, which are more rare. No business in Intellivision or Odyssey games is transacted.

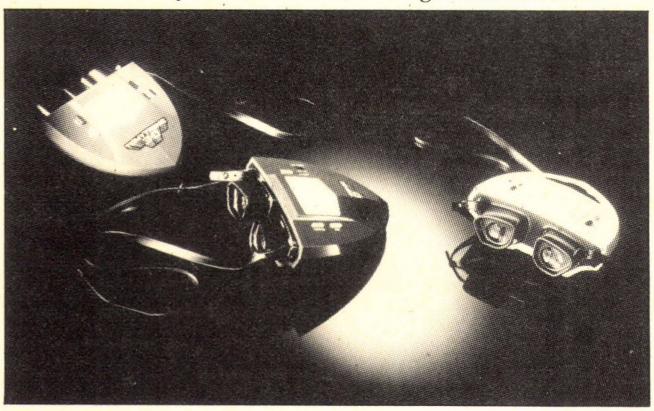
In addition to Forest Hills (63-56 108th St. Forest Hills, NY 11375), interested parties can find used cartridges at the International Video Co-Op in Anaheim, California, the United Software Exchange in Salt Lake City, Utah and Cribbs & Associates in Bedford, Texas.

Neil Levin emphasizes that "there is a game for everybody." meaning that there are no absolutely good or bad games. But he adds that, "*Combat* is one that nobody wants, ourselves included. Games that come back alot include *Asteroids, Defender, Earthworld* (probably too complicated), *E.T., Pac-Man, Star Voyager, Space Invaders* . . . but they all sell well too."

Particular favorites? "On ColecoVision, everything goes; those carts sell well. *Donkey Kong, Berzerk, Amidar, Venture; Video Pinball* is a steady. It's a pity that someone hasn't come out with another video pinball game; there's a huge market for that. *Realsports Baseball* and *Football* do very well; we can't get enough of them. *Kaboom, Grand Prix, Superchallenge Football*—people still love them."

Neil credits much of the success of his business to the durability of the product. "Everything else in this country is made to fall apart. You have to give the manufacturers alot of credit"

We're sure they love you too, Neil. But if not, the budget minded will.



***In addition to making excellent toys such as the hand-held 3D games pictured above, Tomy Corp. has introduced a low-cost computer for kids.***

## BATTLING BINOCULARS

We have to give alot of credit to the Tomy Corporation of Carson, California. Their Tomytronics 3-D hand-held videogames are unique in the field.

The Tomytronics games are like Viewmasters that shoot back. While holding them up to the eyes, fingers are free to manipulate fire and movement buttons. For the considerate or easily irritated, there is an off switch for the sound. For the clumsy, there is a strap to loop around the neck.

Tomy has crafted three Tomytronics games. In *Planet Zeon,* the player controls a spacefighter in a dogfight with enemy spaceships. In *Sky Attack,* the player's futuristic tank is swooped upon by enemy flyers. *Thundering Turbo* is a three lane race game with left/right steering and an accelerator button.

The gameplay is necessarily simple, but difficulty escalates as play continues and the 3-D effects are true and vivid.

Smoke gets in your eyes.

Tomy Corporation is entering the computer age with their Tomy Tutor. The Tutor has built-in BASIC, a sixteen color graphic system, 32K ROM, and 16K RAM expandable to 64K. The Tutor is designed so that an eight year old can operate it with no parental guidance. More in our next issue.

## HI, BILLY! VIDEOGAMING ILUSTRATED!

Players will need clear eyes and clear minds to sort fact from speculation in the new field of cable or telephone-ordered videogames. The first entrants are The Games Network and CVC's Gameline.

The Games Network will offer to subscribers of certain participating cable systems a selection of twenty entertainment and educational games, with a rotation of five new games every month.

For a fifty dollar installation fee, a microcomputer will be installed in the home; the computer allows 64K RAM, and has a twenty four key keypad and ports for joysticks or paddle controllers. By dialing the proper station, for which a fourteen dollar monthly fee is charged, the player is presented with a menu of the twenty games from which (s)he makes a selection. A monthly magazine to subscribers provides new game information and game instructions.

A special key in the computer allows for a pause in game action. The computer cannot be tampered with; it will automatically shut itself off. Nearly five hundred cable companies nationwide have already signed up for The Games Network service.

The Gameline system, from Control Video Corporation, will allow the player to dial a toll-free number, order a game, and play it for anywhere from forty minutes to several hours. This system is only for players with the Atari 2600, Sears, Coleco's Gemini or any of the 2600 adaptor modules.

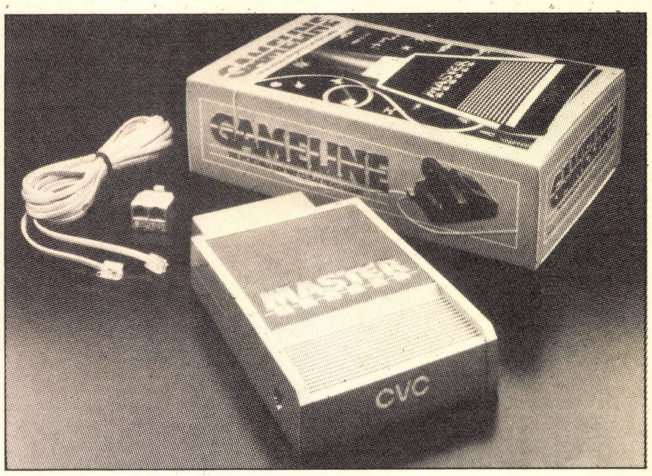
Gameline works like so: you go into Uncle Spud's Electronics World down the block and buy the Gameline Master Module for $59.95. The Master Module consists of a modem, which converts electrical signals carried via telephone lines, two memory devices and an automatic telephone dialer. Uncle Spud then registers your name and personal ID code with Gameline Central in Vienna, Virginia.

Once home, you connect your module to your television and a nearby telephone. When you're first connected to the system, there is a one-time fee of fifteen dollars, which also entitles you to a year's subscription of *Gameliner* magazine; it contains game instructions and new game news.

Now you simply dial a toll-free number and a minute later you are linked into the system. With your joystick you select a code number that corresponds to the game you want, and that game appears on your TV. For a dollar, you play the game for minutes or hours, depending on your skill. Gameline and the particular game manufacturer together determine the per play cost of the game, but most sessions will cost no more than a dollar.

At the end of each game session, a message will appear, such as: "Hi, Billy! Did you enjoy *Yar's Revenge?* You can buy it at Uncle Spud's! Have a nice day!" 1984, you're early.

The telephone is not tied up during gameplay, only during the initial ordering call. All charges are made to the parents' credit card.




*After all the initial charges are dispensed with, a player can play a game for hours for a buck*

There is a predetermined credit limit so the kids can't play the mortgage away and a number of safeguards to ensure that the kids can't raise the weekly credit limit on their own.

Gameline offers a service by which players can check their scores against the high scores nationally; eventually there will be nationwide competitions. Future uses for the Master Module include Sportsline (all the scores), Infoline (stocks etc.), MailLine (for simple electronic mail) and perhaps an electronic banking service.

The Games Network hints at similar future uses for their service, and one other: The Fantasy Network, a videodisk-style entertainment in which players follow a taped or filmed first person adventure and make character choices . . . and then live or die by them.

The Games Network can license games from computergame manufacturers (Broderbund, for example), but both they and Gameline depend on the videogame design firms for their lifeblood: games must be licensed. While the benefits to the consumer are clear (games can be tried out at low cost prior to purchase), the benefits to the manufacturers are not. Gameline boasts that cartridge sales will be boosted by their service. Companies such as Activision and Imagic remain unimpressed.

The prospective buyer should examine a confirmed list of games that will be available before committing to one system or another . . . or either.

Which brings us to Atari. That company is remaining tightlipped, as usual, in regards to their Ataritel division, but it has been announced that Ataritel hardware will include a microprocessor-driven modem and a videoscreen to be attached to the telephone. Uses for the system, which will be available in early 1984, will include home security, appliance and environmental monitoring, teletext and the like, and perhaps long distance, simultaneous, multiple user videogames, competitive and cooperative.

Yea, verily, 'tis the dawn of a new age.

## SHORT NOTES

**Astrocade** owners, rejoice—carefully. A company called Club: Gametics has announced that they will be producing games for that pioneer system, the first games in release for some time. One, Munchie, is a *Pac-Man* clone and the other, *Treasure Trove,* is an underwater adventure. For further information, write Club: Gametics, P.O. Box 10207, Portland, Oregon 97210. At presstime, we hadn't seen the games and cannot recommend or condemn.

N.A.P. Consumer Electronics/**Odyssey** will be developing software for **ColecoVision** and the **Atari 2600.** Odyssey has also licensed the Pink Panther character.

As speculatively reported in our last issue, U.S. Games did go out of business. A spokesman for Quaker Oats, the sorrowful parent company, explained that major investments would have been needed to keep the division afloat; they "did not foresee the rapid oversaturation of the market."

Data Age also went under, as we reported. *Frankenstein's Monster* and other Data Age and U.S. Games games will be marketed by Kandy Man Sales, Inc. of Wichita, Kansas.

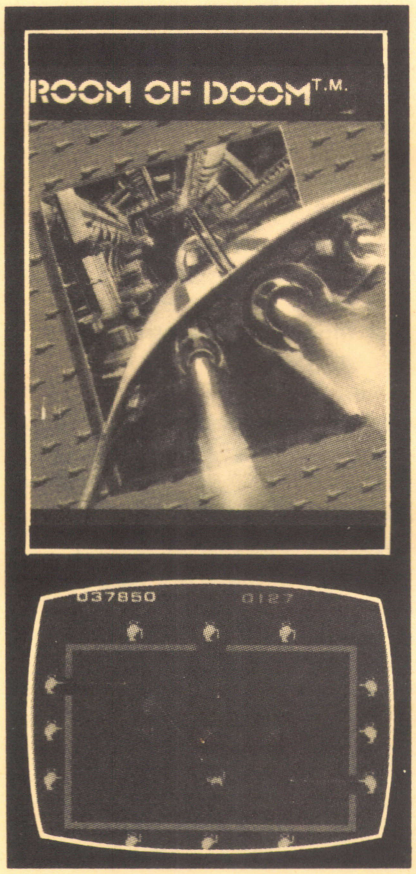
Ultravision, the computer/videogame/television system that we featured in last issue's *Eye On* column, went under without shipping machine one. Insufficient capital was cited as the reason for the company's demise.

Magnetic Tape International has discontinued its video and computergame division, Zimag.

# preview

*E.C. Meade and Jim Clark review the latest videogames.*

**In an effort to make "Preview" more valuable to our readers, we've introduced two new features. Henceforth, beneath the title you will find the manufacturer of the game and the system on which it can be played. Also, following each reviewer's comments will be a gameplay and graphics scorecard, graded from A to F.**




## *Room of Doom*
### *CommaVid for Atari 2600*
### *Object*

You're trapped in a cell that's surrounded on the outside by gunslingers. Ports open at irregular intervals to allow them to shoot at you; only when these doors are open can you shoot back, dodging their stream of bullets.

Inside the room are devious monsters who dog your steps and must be shot before they gobble you down.

Once a gunslinger is slain, it cannot return during that level; monsters, however, are constantly being recycled. The player is allowed four figures.

Complicating matters, the monsters within the room gain strength as the game progresses: at a certain point, if you have not cleared the gunslingers, the monster becomes invulnerable to your bullets and can only be eluded by a hasty retreat.

E.C.M.: At last, an innovative concept for the 2600! If one were forced to make comparisons, *Room of Doom*—which is a horrible name, incidentally; something punchier like *Trapped!* would have made more commercial sense—*Room of Doom* is a *very* claustrophobic *Berzerk.*

Tactically, this game's nerves-of-steel time; it's a video version of "chicken." The doors open long enough for you to get off only one or two shots before you're barraged from the outside, and the monster hugs you like a shadow.

The graphics are, sadly, quite bland. The figures are blocklike heaps, and their deaths are particularly uninspired—each becomes a jagged smear before vanishing. Nonetheless, you'll enjoy this one for months, an impressive achievement in the overcrowded field.

*Gameplay:* A–
*Graphics:* D

J.C.: The key word here, as E.C. noted, is "claustrophobic." Between the crossfire set up by the symmetrically arranged antagonists, and the roaming monster—not to mention obstacles which appear in the later screens—the field becomes very crowded very quickly. The player is overcome by a giddy sense of panic in this topnotch cartridge.

Oddly, while gameplay could not have been improved, *Room of Doom* exposes the limitations of the 2600. After a player has sampled the 5200, ColecoVision, or Odyssey 3, even the most exciting game on this workhorse seems hopelessly primitive. This is *not* a slap against the designers or the equipment itself: hardened videogamers should, however, be aware of the difference before investing further in cartridges for the unit.

*Gameplay:* B+
*Graphics:* D+

## *Dishaster*
### *ZiMag for Atari 2600*
### *Object*

Remember those dextrous folk who spin dishes atop long, thin poles in the circus sideshow? Here's your chance to emulate those notables. The folk, that is, not the poles.

Your objective is to keep the plates on from six to nine poles spinning. As soon as they begin to wobble, you must run the little girl beneath the pole, punch down the action button, and reinforce the spin—by which time two other plates will have begun to slip.

If you don't get there in time to keep the plate from falling, you can catch it; a new plate will automatically appear on top of the pole.

You get extra reserve plates for various scoring *plate*aus.

E.C.M: There's good news, and

there's bad news. The good news is that this is an entirely original cartridge; there's nothing like it on the market. The bad news is, no wonder: it's a bore.

I make no bones about the fact that I like my videogames fast and crisp. Teetering discs which give you no impetus to keep them whirling—there's plenty of time to save them if they fall—compounded by crudely sketched graphics, just don't fill the bill.

If ZiMag had the hots for a pole game, a stiltwalker moving over and under circus trappings would have made more sense.

*Gameplay:* D+
*Graphics:* D+

J.C.: E.C. is letting her general disgust with ZiMag product color her views of this game. *Dishaster* isn't as bad as all that.

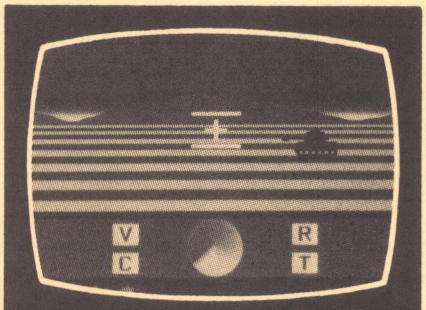
Playing *Dishaster* isn't just a matter of catching the dishes once they've fallen. You are challenged to repair them in the sequence in which they lose their spin, since that dictates the order in which they'll tumble; you also must be prepared to abandon a wobbling dish to catch one which has taken a spill.

It may not be the most exciting *subject* on earth, and adults will find the strategies a bit obvious. But the game is fast and requires quick judgments.

Furthermore, *Dishaster* appeals to young and old and, as a non-violent attraction, is to be commended.

If this game were to receive proper promotion—which is doubtful, since the company isn't going to invest further coin in a defunct line—it just might catch on.

*Gameplay:* C+
*Graphics:* C




*In our next issue, not only will our dual reviewers lend their impressions of Activision's* Robot Tank, *but strategies.*

### *Tanks But No Tanks*
***ZiMag for Atari 2600***
***Object***

You are the sole defender of the last remaining rebel outpost, under attack by a force of phantom tanks. As they move through the maze toward your base, you must pick them off—all the while avoiding their fire.

If any of the tanks reaches your base, the round is over.

Since all of the enemy tanks are not on the screen at any given time, a counter at the bottom of the screen indicates how many remain.

J.C.: If no one in your neighborhood is discounting CBS's excellent *Wizard of Wor,* this one is an adequate substitute if you can find it in the fifteen dollar range. Not only is the cat-and-mouse aspect similar to the CBS cartridge, but more and more maze walls disappear in subsequent levels until it's just you vs. them in the open field.

However, the games differ in that there's the added challenge here of having to defend your base against the relentless enemy tanks. Nor are these tanks as gullible as the Burwors, Garwors, etc. of *Wizard of Wor;* that is, they don't usually stumble into your line of fire.

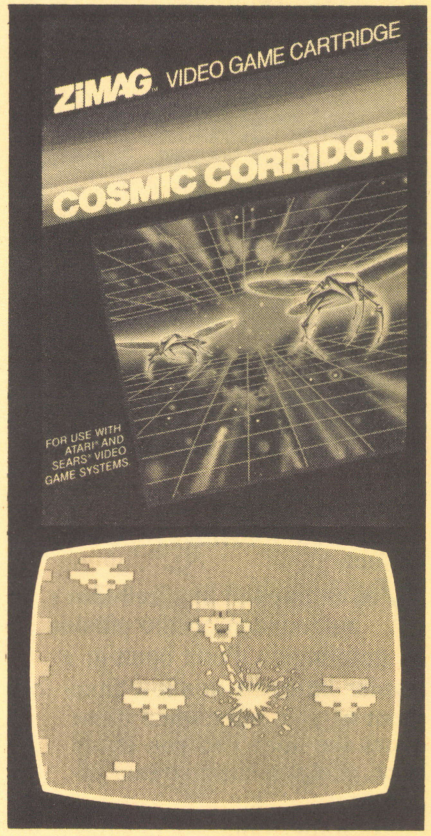
The graphics are embarrassingly primitive, reminiscent of Atari's old *Combat* cartridge. But the game itself is good, the best of the instantly infamous ZiMag Four.

*Gameplay:* C+
*Graphics:* D+

E.C.M.: Jim missed a critical point of departure between *Wizard of Wor* and *Tanks But No Tanks:* you actually come to *hate* the little nasties in the Wor maze. I couldn't care less about the tanks. With gameplay so similar, these two cartridges illustrate the difference characterization makes in a game.

As far as I'm concerned, save your money for *Wizard of Wor.*

*Gameplay:* D+
*Graphics:* D




### *Cosmic Corridor*
***ZiMag for Atari 2600***
***Object***

Your spaceship is caught in hostile space at the edge of the galaxy. There, as the screen scrolls vertically, you are assaulted by aliens.

You can be destroyed by crashing into an alien, being shot by one, or by sliding into the walls of antimatter which border this region of space and give the game

its name.

Your defenses consist of the ability to navigate left/right, up/down, and to fire from all sides.

E.C.M.: After releasing their first batch of games, ZiMag announced that they're discontinuing their cartridge line. Good move. The games are uniformly awful. Look for them to join the Data Age cartridges on the five-to-seven dollar racks. Even then, buy these cartridges only if you are desperate.

*Cosmic Corridor* is an unimaginative rehash of the *Vanguard/Fantastic Voyage* theme. The action is comparatively slow, drab graphics contributing to the boredom.

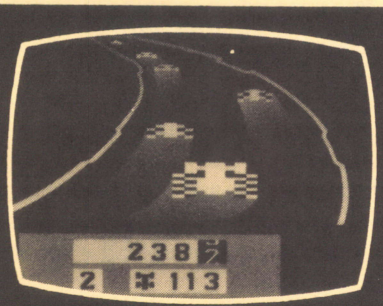
I've not given this game the lowest grade because, for all its faults, *Cosmic Corridor*, if not enjoyable, is at least playable, which is more than can be said for the worst-of-the-worst, Apollo's *Skeet Shoot.*

*Gameplay:* D–
*Graphics:* D–

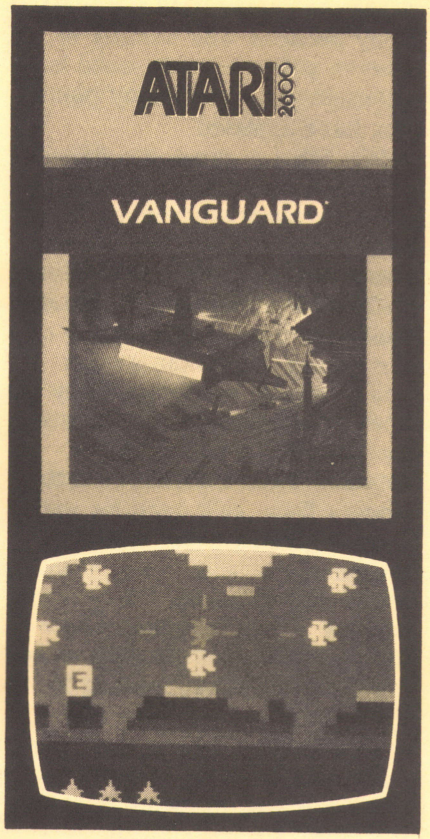
J.C.: Comparatively speaking, E.C. is correct: *Cosmic Corridor* is not up to the better games of this type. However, I resist this form of evaluation. To use a Meadean analogy, *Jaws* may not be the novel that *Moby Dick* is, but that doesn't mean you can't enjoy them both.

I'm not going to defend *Cosmic Corridor:* it's every bit as derivative as E.C. suggests. The attack patterns of the aliens are different from other games and, if you can get it at a good price, you won't have to bother with the other, costlier cartridges of this type.

*Gameplay:* C–
*Graphics: D*




*In our next issue, Jim Clark and E.C. Meade will review Activision's hell-for-leather driving game for the Atari 2600,* Enduro.




## *Vanguard*

### *Atari for the Atari 5200*

### *Object*

As a space pilot, you must maneuver your ship through a variety of narrow channels on an alien world, all the while dogfighting the adversaries which lurk within.

Your space ship fires laser beams straight ahead, though by tugging the joystick in any of the other three directions you can, simultaneously, fire in that direction as well—though only briefly, since your ship, responding to the joystick command, starts drifting in that second direction; in the narrow confines of the terrain, it won't be long before you crash.

Your journey carries you through seven different screens, climaxed by a confrontation with the great Gond in the fabulous City of Mystery. Gond is protected by a pair of moving walls; while dodging missiles which are launched at you from the sides, you must wait until the small gap in each barrier lines up, then place a projectile through them. When hit, Gond turns every shade of the rainbow before perishing.

You are granted five ships, a limited amount of fuel, and an unlimited amount of ammunition.

E.C.M.: My compliments to Atari for an excellent adaptation of the Centuri arcade game. *However*—Rock group Queen and composer Jerry Goldsmith should sue. During gameplay, the driving battle music from the film *Flash Gordon* and the stirring theme song from *Star Trek: The Motion Picture* are played. Tributes to artists are nice, but this goes beyond homage.

That minor argument aside, *Vanguard* is better than the ColecoVision cartridge it resembles, *Cosmic Avenger.* The tortuous settings are more atmospheric and challenging, and the fleets of ships and monsters move in more exciting patterns than the ships and sitting-duck cities of *Cosmic Avenger.*

Also unlike *Cosmic Avenger,* the seven courses are each unlike the next. You go from waging a horizontal battle to a vertical struggle, to a diagonal battle from bottom-left to top right, then from top left to bottom right—all of which tends to keep things hopping. At the same time, each battleground has its own unique look, composed either of stripes, stars, Xs, jagged walls, and the like.

There's also another very appealing element: the fact that you can continue a game from where you left off *or* jump right to any of the screens which appeals to you.

You'll have a fine time with this one!

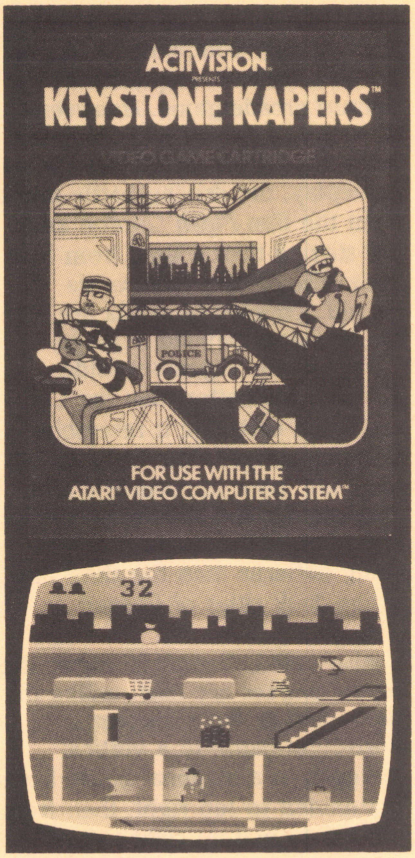
*Gameplay:* A–
*Graphics:* B+

J.C.: Despite the merits mentioned by E.C., I found *Vanguard* a routine gunning game. It's a cartridge which depends more on split-second reaction time than on strategy, a superficial skill at best; it's the kind of game which wears thin after a few weeks. Besides, we've seen it all before in *Planet Patrol, Defender, Chopper Command,* ad nauseam.

Of the kind—yes, it's good. *Vanguard* moves like a bullet, and the many different screens are impressive. But, unlike *Space Dungeon,* there is no pacing and suspense.

This is the videogame equivalent of busywork.

*Gameplay:* C+
*Graphics:* B




### *Keystone Kapers*
### *Activision for Atari 2600*
### *Object*

Keystone Kelly the Kop is a security guard at a department store. Harry Hooligan is a Krook. Kelly must chase him through four levels of four horizontal screens. Access to each floor is by elevator or escalator—though the escalators for alternating floors are located at opposite ends of the horizontal scroll.

There is a Long Range Scanner at the bottom of the screen, helping Kelly keep track of Harry. The law officer must keep his eyes open for bags of money which Harry drops as the pursuit becomes more heated; grabbing them wins him points.

Kelly must also jump and dodge various obstacles, such as rolling shopping carts, bouncing basketballs, oldtime cathedral radios, toy airplanes, and the like. Colliding with any of these objects will cost Kelly time.

Since a player's score is determined not only by the money recovered but by the time remaining when (and if) Harry is apprehended, each second counts.

If time runs out, or if the Krook is able to escape onto the roof, Kelly perishes. The number of reserve police in your squad is determined by how many points you have amassed.

J.C.: What a game! It's difficult to believe that this is already Activision's twenty-fifth game; Michelangelo didn't produce as many masterpieces in his lifetime!

*Keystone Kapers* might just as well have been called *Putting on the Brakes,* since that is what you're constantly doing. Harry has been programmed to avoid you: for example, if you're on the elevator and it's about to reach Harry's floor, he'll head for the nearest escalator and make mincemeat of your plans. Thinking ahead and cornering Harry is the real joy in this cartridge. There's nothing quite so frustrating as being in the elevator, heading for the third floor, and watching Harry descend to the second.

My only negative comment is that while the obstacles are plentiful, they are less difficult to negotiate than those of *Pitfall. Keystone Kapers* requires as much strategy as that august hit; I only hope the moldy 1920s motif doesn't put off prospective buyers.

*Gameplay:* B+
*Graphics:* B+

E.C.M.: *Keystone Kapers* has the smell of success, not just because it has distilled the best elements from other hit cartridges—*Pitfall* and *Donkey Kong*—but because it has done so in an entertaining and challenging fashion.

Though I'm not about to compare this game to *David* or the Sistine Chapel ceiling—shame on you, Jim—it's one of the few games on the market worth the price of purchase. Activision's other current release, *Dolphin,* is far more innovative, but is infinitely less exciting; *Keystone Kapers* requires speed, patience, and thought.

To top it off, Activision has cornered the market on squeezing not only brilliant graphics but superb characterization from the 2600. Kelly, his legs churning and arms pumping, is an absolute delight, the best videogame character we've had since the Mad Bomber of *Kaboom!*

Incidentally, with the release of this cartridge *Videogaming Illustrated* earns yet another notch in its belt. In our first issue, we invented eight games for "You Read It Here First"; two are now reality, *Keystone Kops* and *Wizard of Oz* (the latter from Coleco). While we're busy bragging, *B.C.,* also suggested in that issue, is being developed as a computergame—with gameplay identical to what we described; *L-5,* which we published in our second issue, became the subject of a Data Age cartridge; and *Evolution,* from issue five, has since been served up for the Apple II from Sydney development.

Just in case you were keeping score . . .

*Gameplay:* B+
*Graphics:* B+

### *Happy Trails*
### *Activision for Intellivision*
### *Object*

The stagecoach has been robbed, but clumsy Black Bart has dropped moneybags all over the landscape.

As a sheriff's deputy, you must don a badge, collect the money, and nab the thief. There's just one catch: you can only get about the screen by walking along the well-

worn trail, each section of which is contained in a square. There are several squares per-screen, but they're jumbled when each level begins: thus, the pieces of trail are out of order. Using the Intellivision joystick, you must shift the squares around *quickly* so that the deputy walks off the end of one trail onto the beginning of another. If not, if he strolls onto the grass or off the prairie entirely, you lose one of your four cowpokes.

A screen is completed when all the objects have been recovered; each succeeding course is more complex. According to player preference, the landscape can be the same or random from game-to-game.

Points are given for each moneybag or robber you catch; the faster the screen is cleared, the higher the award.

J.C.: This videogame reminds me of those puzzles where one must slide plastic tiles around in a frame, putting numbers in order or assembling a portrait of Bo Duke.

Of course, those games give you time to sit and think: not Activision's *Happy Trails.* The cowboy is constantly moving which means, right or wrong, you've got to give him turf on which to walk. If you're right, you'll bring him closer to one of the objects on this western scavenger hunt. If you're wrong, you'll take him in the opposite direction and waste valuable time.

*Happy Trails* is one of the most entertaining videogames you can buy, and I urge Intellivision owners to do just that. It taxes *both* your ability to reason and your dexterity, an absolute delight.

And, I am only too happy to add, it's refreshing to see a videogame which is set in the past rather than in some remote and violent future!

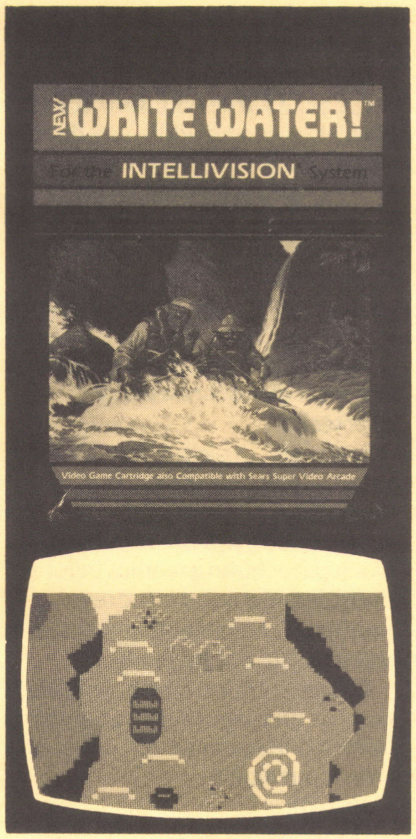
*Gameplay:* B+
*Graphics:* B

E.C.M.: This game reminds *me* of the Centuri arcade game *Loco-Motion,* wherein the player guides a train safely around the screen by sliding around pieces of track. Instead of moneybags *Loco-Motion* has passengers, and in the place of the robber there are other trains trying to pile into you.

While the train-and-track motif seems more natural for this theme, *Happy Trails* is a wonderfully maddening cartridge. Unlike most videogames, where an enemy takes you by surprise—a fast-moving missile striking your gun-base, a carnivore cornering you in a maze, a barrel dropping on your skull—you *see* the downfall of your intrepid deputy seconds before he strolls off the square. It's called "blissful frustration" as, in those taut moments, you shift frantically to get him a trail on which to tread. Trails can even be moved when the deputy is on them, adding to the options and compounding your tension.

A novel addition to the Intellivision-compatible library, and sure to be a standard for the console!

*Gameplay:* A–
*Graphics:* B




### *White Water!*
***by Imagic for Intellivision***
***Object***

Three adventurers have elected to race along an uncharted river, braving whirlpools, barrels, rocks, and shoals. You are the pilot: not only must you avoid the dangers, but do so in the best possible time.

Meanwhile, you must pause to rescue crewmembers pitched from the raft, also stopping at beaches to go inland.

Traipsing about on dry land, you are searching for Money-bags and Golden Urns, trying not to offend Big Kahuna, Chief of the River Tribe, by going after an Urn without first proving yourself in the ritual of flag-collecting. If you cheat, try to skip the gathering of banners, Big Kahuna will pelt you with tomahawks; if you manage to survive these, you will find the river much more rapid than before.

All the while, a native will be challenging you for the flags and the Urn, so you'll have to be quick.

J.C.: *White Water!* is an absolutely wonderful game. It's unusual, it's demanding without being convoluted, and there's an overriding sense of adventure. For my money, it's much more dimensional, much more exciting than *Pitfall.*

One of the reasons this game works is there's a sense of the world beyond the river. Psychologically, that's a tremendous boost. The river itself is always topographically different, and the designers have given the movements of the raft astonishing verisimilitude. It responds just as a raft should.

There's always something different going on, none of it dull. And, happily, none of it *shooting. White Water!* is the kind of action challenge which gives videogaming a good name.

*Graphics:* B+
*Gameplay:* A

E.C.M.: Not only is this game terrific, but considering how derivative it *could* have been makes me appreciate it even more.

I especially admire the secondary Urn Game. Since the river itself is worth the price of admission, this bonus game *could* have been mere windowdressing. And while the graphics in the forest adventure are necessarily skimpy—there's a lot of memory used for the river itself—Imagic endowed the land mode with its own demands and tactics, which would have made for a fine cartridge on its own.

And there's an added bonus if you gather at least three Urns: Big Kahuna shows his admiration for the feat by upping the ante with more Urns and a Treasure Chest. If, that is, you can survive the river to the next

beach . . ..

I'm not sure the subject matter of *White Water!* is going to win this game much-deserved commercial success. However I, for one, will be rooting for it.

*Graphics:* B
*Gameplay:* A

### *M*A*S*H*
**by Games of the Century for Atari 2600**
**Object**

You're Hawkeye Pierce, Chief Medical Surgeon of the 4077th MASH. Your duty is to rescue personnel from the battlefield and, having returned them to the hospital, remove shrapnel from their bodies.

In the rescue mode, you must navigate around trees which clutter the field, and avoid fire from a North Korean tank. All the while you're competing against a second computer—or player—controlled chopper.

In the operating mode, you must use pincers to guide the shrapnel through a maze. Touch the walls of the maze and the patient dies.

J.C.: Let me get this out of the way lest my nuts-and-bolts review be too subjective. I think this game is in horrendous bad taste.

The fact that our war "worked" as a TV entertainment was a virtue of good writing and acting. The series commented upon the tragedy. Reducing war to a videogame merely exploits it. How anyone can perceive operating on an injured soldier as entertaining eludes me.

I'm sure the folks at Fox will say I'm intellectualizing this too much, but I submit they could have found something else in the series which would have lent itself to a videogame. Perhaps getting Hot Lips to Tokyo. . . .

Indeed, they should have come up with a different scenario simply from a commercial point of view: the game is as dull as an old rerun. It's *Choplifter* without the graphics or scrolling screen; circumnavigating the few trees won't appeal to anyone except the beginning gamer.

This *M*A*S*H* should have been grounded.

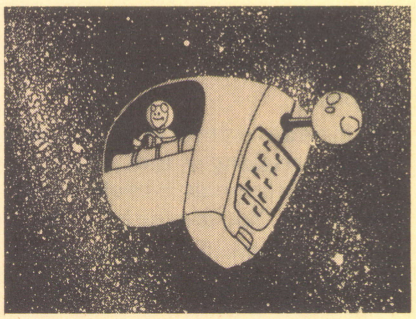
*Graphics:* D–
*Gameplay:* D

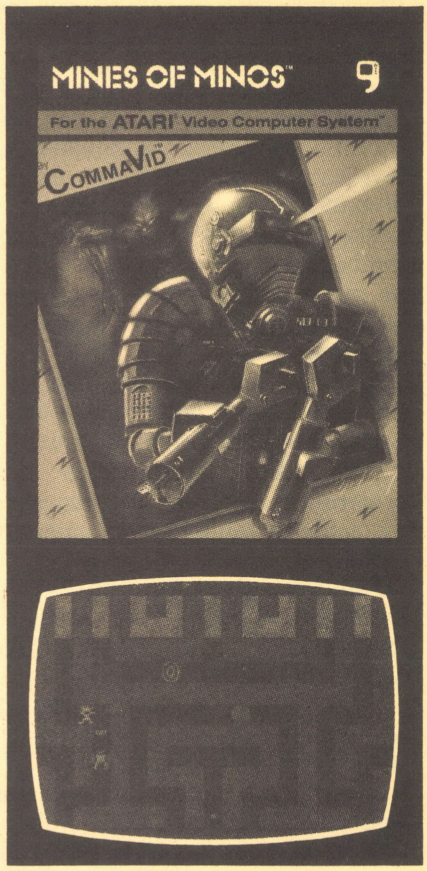
E.C.M.: I agree with Jim on an ethical level, and while any discussion of gameplay fades to insignificance beside his considerations, I *am* bothered by the fact that this game fails to key-in on what made *M*A*S*H* so popular: the characters. Maybe Games of the Century should have done to Hawkeye, Hot Lips, and the others what Parker Brothers did to Strawberry Shortcake.

Seriously, this cartridge *is* a big zero, lacking ingenuity, challenge, visual flair, or personality. The variation in which you are required to catch parachuting medics before they hit the ground is more interesting than collecting the injured soldiers, but not by much.

Designer Dallas North, who also gave us unimaginative videogames based on *Megaforce* and *Alien,* has struck out again.

*Graphics:* D
*Gameplay:* D+






### *Mines of Minos*
### *CommaVid for Atari 2600*
**Object**

The robots who mine the underground caverns of a distant world have been conquered by aliens. Only a single robot survives to battle the intruders, and the first order of business is to rebuild other androids, all of whom have been dismantled.

As the player cavorts in the maze, gathering pieces of the broken robots, he/she is chased by aliens. The only defense is rapid flight or the placement of time bombs. These automatically detonate if an alien passes over them; if the alien changes course, the bomb disarms after a few seconds. Only one bomb can be placed at a time.

To top things off, the mine is steadily flooding, which slows the robot and renders the bombs useless.

If the player is able to gather sufficient robot parts, she/he wins a spare robot.

J.C.: An exciting 2600 chase game enhanced by a fundamental "Catch-22": if you hurry through the (unchanging) maze, you'll be trapped on two sides by aliens; if

you move slowly, the flood will inhibit your progress. Caught between two invaders, all you can do is take out one with a bomb and hope that it is destroyed in time for you to plant a second explosive.

It's refreshing to see a "quest" cartridge which is not a ladder game of the *Donkey Kong, Infiltrate, Adventures of Tron* school, or else is set in a medieval world. As with *Room of Doom,* this cartridge from the new CommaVid group is strong in gameplay, weak on graphics, but a novel and worthwhile addition to your videogaming library.

*Gameplay:* B
*Graphics:* C–

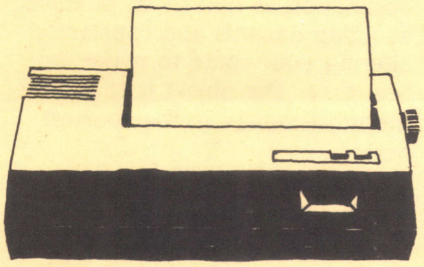
E.C.M.: As far I'm concerned, you can save your money on this one and just trot out Atari's old *Adventure* cartridge. If you don't own *Adventure,* it's still the better game.

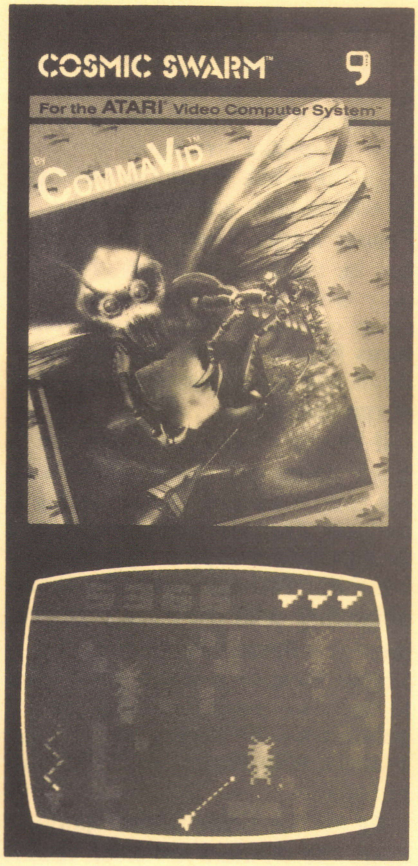
The mazes are remarkably similar, the dragons are worthier foes than the aliens—not only do the serpents pass *through* the walls of the maze, but you've got to find the sword before you can beat them—and the *Adventure* graphics are simply superior, from the fluid movement of the knight-cursor (*this* game's robot is a stiff) to the scintillating visuals of the grail (the robot parts in *Mines of Minos* a worthy substitute? Not really.). The maze is moronically simple, intended less as a confusing labyrinth than a place to be cornered by aliens. In that sense, there is some tension now and then—but not thirty-odd dollars worth.

The game would have been improved considerably by making it lethal to run over your own bombs. That would have provided the maze with "instant walls" for the player to work around.

In a word, I rate this *feh!*

*Gameplay:* C
*Graphics:* D+






## *Cosmic Swarm*

***CommaVid for Atari 2600***

***Object***

Waypoint is an intersteller trade depot situated among the stars. However, having decided to take over the warehouse, a colony of giant, mineral-eating termites begin constructing a nest therein.

Using armored probe ships, you must shoot both the invaders and the pieces of nest. Collision with either destroys one of your four ships.

Segments of the nest can be eliminated only when you strike a block as it's being carried by an insect.

Your projectile will destroy both the termite and its cargo, simultaneously turning all the *other* blocks on the screen from green to red: they can now be blasted in turn.

However, the instant you shoot another insect (other than by hitting it through the nest-piece it's carrying) the blocks turn green again and *cannot* be removed. And you'll be forced to shoot insects soon since, when the nest-pieces are red, the bugs abandon their building chores to pursue your ship across the screen.

Compounding your problems is the necessity to dock with a fuel ship every now and then. If it crosses the screen before you rendezvous, the game ends regardless of how many probe ships are in reserve.

E.C.M.: This 2600 CommaVid game is a cross between two popular Atari games. You've got to swing your ship in 360 degree arcs to nail the insects (a la *Asteroids*) while maneuvering among and occasionally shooting away the building-blocks (ie.the *Centipede* "mushrooms").

The blend makes for an entirely new game, however, one which will keep you jumping. The insects always creep in from the top of the screen, usually where you're not; and though the bugs are easy targets, the blocks they're carrying aren't.

In short, *Cosmic Swarm* is no day at the park. It takes less than a minute for the screen to clutter completely with green nest pieces, at which point your movements are so restricted—remember, you blow up if you collide with anything—it's a nightmare negotiating through the crowd to draw a bead on a block-bearing insect.

CommaVid's off to an impressive start, though once again they should have been more careful in selecting a name: *Cosmic Swarm* is the kind of thing which slides right off the brain. We've had *Cosmic Ark* and *Cosmic Avenger*; and *Swarm,* of course, is a loser of a name since Irwin Allen made the unbelievably crappy movie. The name's like white noise: it's there, but you don't really hear it. A new company needs all the ammunition it can get to go against the Big Folk.

*Gameplay:* B
*Graphics:* B–

J.C.: Unhappily, this game reminds me of the Data Age cartridge *Bugs* . I say "unhappily" because I'd like to see CommaVid succeed. But if the highly visible *Bugs* bombed, I can only hope CommaVid has some magic up its sleeve for promoting *Cosmic Swarm.* The time is long-gone when a company can throw a good game into the marketplace

and watch it succeed on its own merits.

Having done my cheerleader act for CommaVid, I have to admit that I liked *Bugs* better. Gameplay was better focused: the insects crept several at a time from the top and you had to pick them off before they reached you. Data Age created speed through the sheer numbers of bugs they unleashed.

Here, gameplay is all over the place. You shoot up, down, to the sides, at an angle; *Cosmic Swarm* creates rapid pace through confusion.

CommaVid may well have distilled what's appealing in *Asteroids* and *Centipede,* but, metaphorically speaking, the result is like a spaghetti milkshake. The ingredients were better left where they were.

*Gameplay:* B+
*Graphics:* C+

### *Pepper II*
### *by Coleco for ColecoVision*
### *Object*

The player must move the Pepper Angel around a track, zipping the rails "shut" as it goes. The tracks are arranged in connecting squares, rectangles, etc; points are scored when each shape has been closed on all four sides.

When all the shapes on one board have been zippered, the player moves Pepper Angel to the next maze-like structure.

All the while, Roaming Eyes try to collide with and destroy the Pepper Angel. They themselves can be run-over and obliterated only when the player encloses a room containing a pitchfork. That turns Pepper Angel into Pepper Devil and grants several seconds of omnipotence.

If Pepper Angel re-crosses the track siding any shape which is not fully enclosed, the zippering is undone. This also happens when a vicious Zipper Ripper appears.

E.C.M.: To begin with, for those unfamiliar with the arcade game, there was never a *Pepper I.* Exidy simply thought it was a good idea to tantalize (read befuddle) the public with the name. See *Videogaming Illustrated #3* for the full story.

As for the ColecoVision game itself, the winners just keep coming. The track is full of challenging short-term objectives (closing the shapes), as well as the long-term goal of completing each screen. The unzipping hazard and random movement of the Eyes makes for some frantic moments on every screen, particularly when gameplay moves at light-speeds in later levels.

This one's must-playing for all those who enjoy *Lady Bug* and *Mouse Trap.*

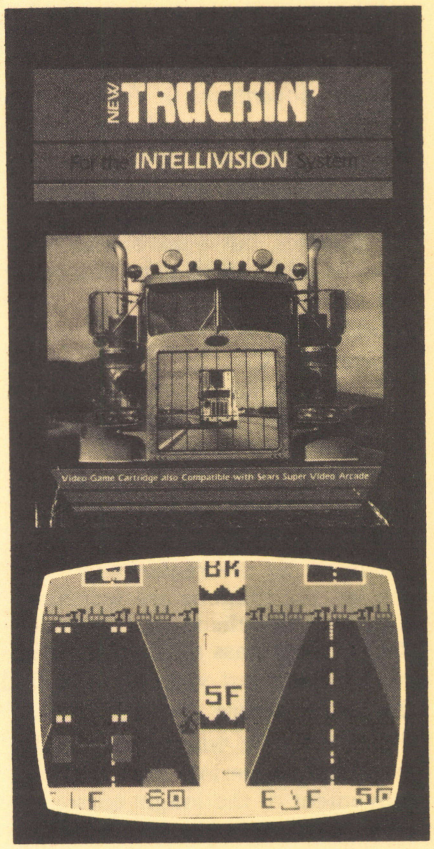
My only complaint is that, unlike the Lady Bug and Mouse, Pepper Angel moves along the tracks as though they were greased. You miss a lot of turns because the character simply doesn't stop in time. That's not a handicap, it's a pain in the neck.

*Gameplay:* A–
*Graphics:* A

J.C.: A good maze game, *Pepper II* nonetheless struck me as somewhat shallow. *Lady Bug* has the revolving doors, the scattered letters which must be eaten to spell bonus words, the vanishing vegetables, and so forth; *Mouse Trap* has the cute characters and the dog-mode. *Pepper II* is a faceless chase game with nothing new to offer.

If you're a fanatic about games of the aforementioned school, you'll want to add this to your library. If not, *Lady Bug* remains the best of them.

*Gameplay:* B+
*Graphics:* A–




### *Truckin'*
### *Imagic for Intellivision*
### *Object*

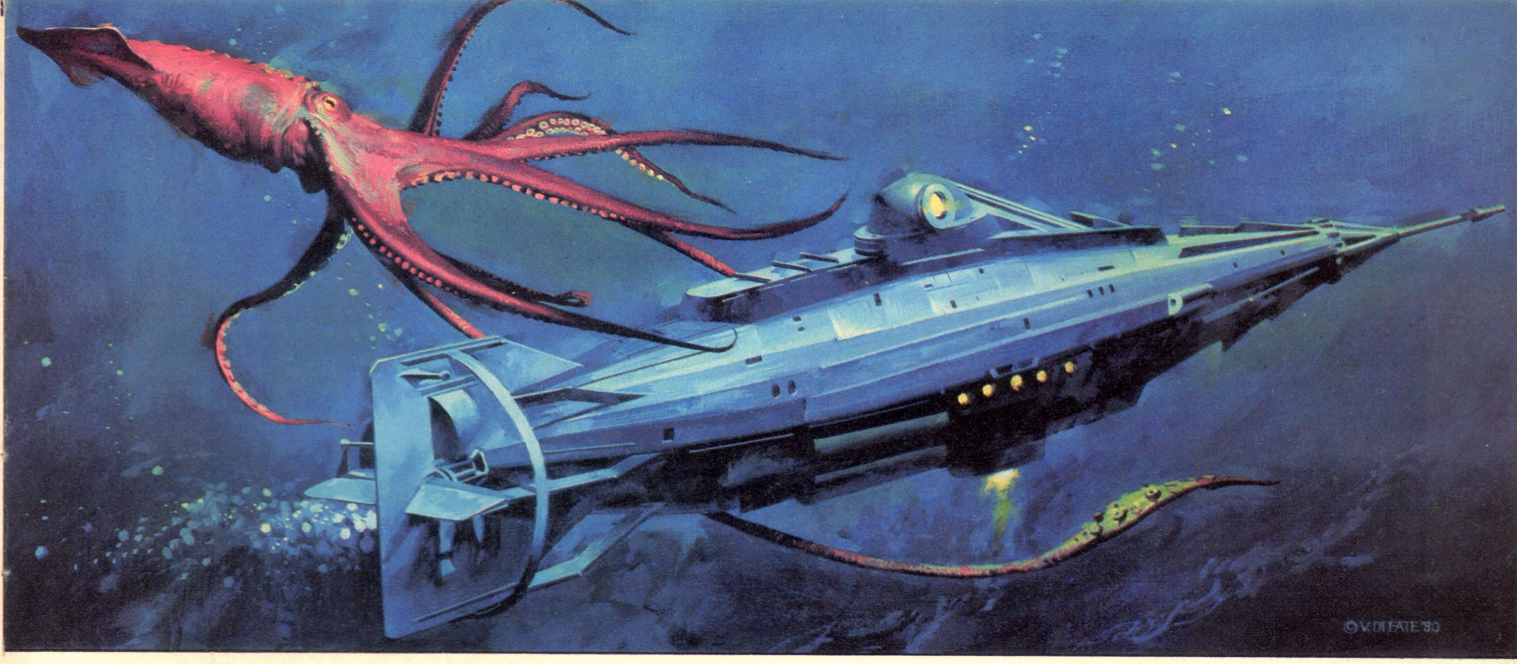
There are two game variations. The first: drive to eight cities in the shortest possible time. You carry no cargo, but have to watch out for road hazards such as oncoming vehicles, gassing up delays, and the police. All cost time and money.

The second: you are driving a truck from city to city, carrying cargo which ranges from cattle to milk to corn to gravel. Each of these carries a different cash value. You must get to your destination as quickly as possible, avoiding hazards and constantly altering your route to make the best time. The object is to make the most money in the shortest period.

Your fatigue level affects the maximum driving speed.

J.C.: This game reminds me of

*Continued on page 73*




# Video Devils of the Deep

***A new school of videogames beckons players to explore the silent savagery of the deep sea.***

Metaphor must often suffice when mankind cannot find a basis for unreasoning fears.

**When the whale devoured Jonah** and later spat him safely upon the shore, it was said to be a demonstration of the power and mercy of God.

Melville's Moby Dick is commonly interpreted as a symbol of the will of God, the forces of nature, or fate. When Ahab defied the white whale and blasphemously sought to hunt and kill it, Ahab and all who followed him were quite naturally destroyed.

In the film *Jaws,* Robert Shaw as Quint delivered a magnificent speech that summoned the audience's terror of sharks. He referred to the shark's "black eyes, lifeless eyes" that roll over when its soulless, joyless bite is delivered.

And if metaphor fails, there is science.

Darwin held that humans evolved from sea creatures. A human fetus, in its initial stages of development, reflects our aquatic/reptilian ancestry. Not coincidentally, many of us are repelled by fish; they're silent, slime-coated ciphers.

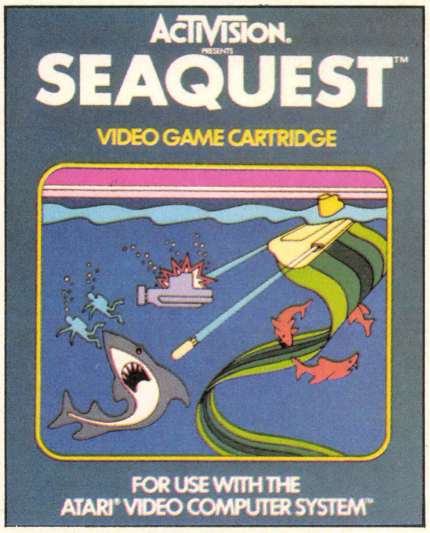
Scientific and literary flourishes aside, we hold the sea in awe and terror because we cannot control it. We fear sharks because they can eat us. The primal fear of being eaten is the basis of many a movie, serial, book . . . and videogame. *Pac-Man,* for all its cute trimmings, boils down to a frolic of ingestion. Many similar games followed.

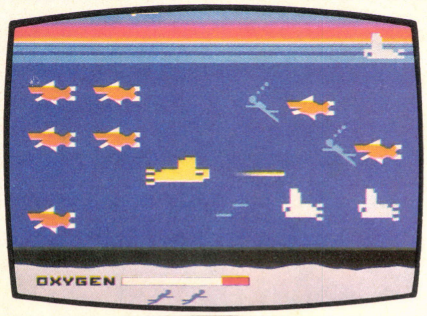
For players who are tired of space games, there exists a variety of contests set in a universe as mysterious and as violent.

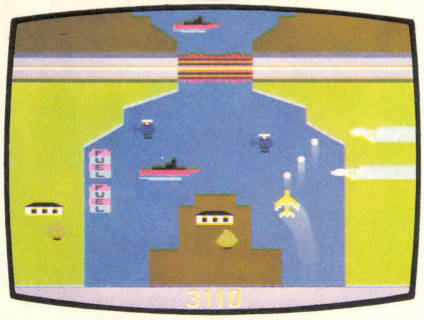
Sea games that play on our fear of being devoured are *Seaquest, Jungle Hunt* and *Shark Attack.*

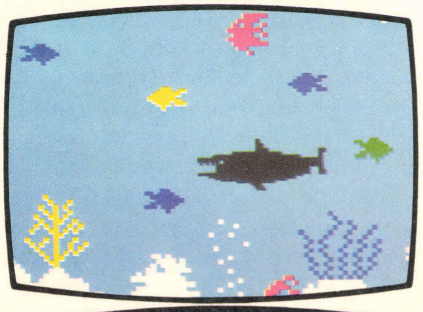
In Activision's *Seaquest* for the 2600, the player, controlling a submarine, must save drowning sailors from shark and enemy-infested waters and deliver them to a surface ship. While sharks and enemy subs close in from either side of the screen, the player must touch a sailor with his/her sub, thus plucking the sailor from danger. By surfacing, the player delivers sailors to safety and replenishes the sub's oxygen supply. The player can dare to rescue a sailor already clamped in the jaws of a shark and must continually decide between saving the sailors or his/her own sub.

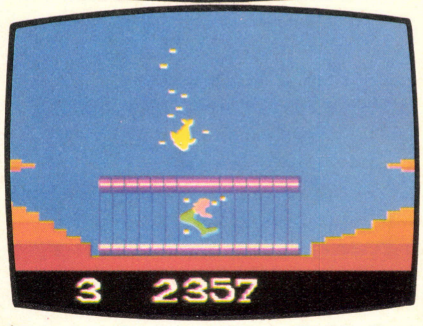
*Seaquest's* undulating undersea graphics are a delight. The rescue theme is unique, welcome and involving. Unfortunately, gameplay






**Seaquest** ***(top) and*** **River Raid,** ***from Activision, Mattel's*** **Shark! Shark!** ***and Imagic's*** **Fathom.**

is not varied enough to hold a player's attention over a period of months. A fine game nonetheless.

Atari's *Shark Attack* for the 2600 is an undersea maze game. The player gathers treasure literally dotted throughout the maze while avoiding horizontally gliding sharks. Gameplay is something of a nightmare: we've all dreamed of trying to move quickly yet some mysterious force is holding us back. Negotiating the *Shark Attack* maze is similar. Call it barnacles or close quarters or diver disorientation, turning corners in the maze is a challenge in itself.

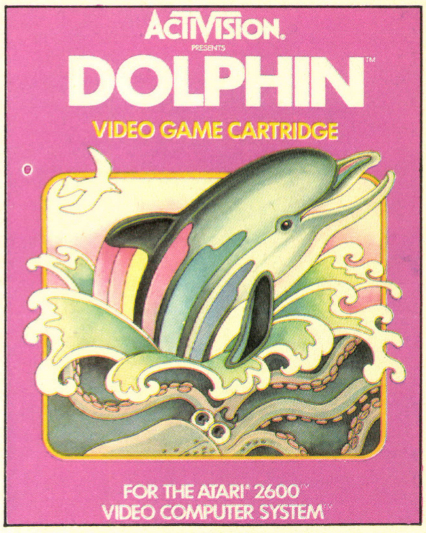
One of the many hazards facing the hero of Atari's *Jungle Hunt* for the 2600 and 5200 is a river aswarm with crocodiles. *Jungle Hunt* is a deserved success for Atari, with its crisp graphics and fast and varied gameplay. And it's all for love.

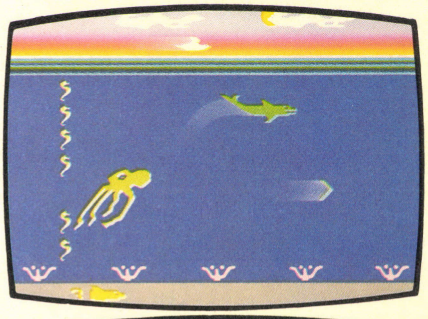
Games that explore the dog-eat-dog realm of the sea but feature an all-fish cast are *Shark! Shark!*, *Dolphin,* and *Fathom.*

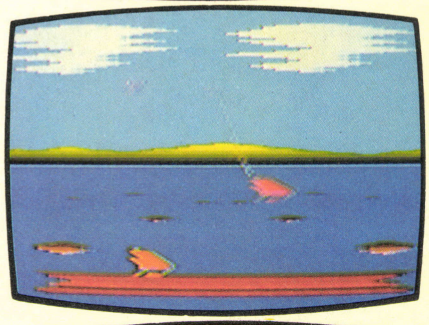
In Mattel's *Shark! Shark!* for Intellivision, the player begins as a small fish. With every smaller fish or scrub that is eaten, the player's fish grows and swims faster. As the fish grows, the variety of its diet grows as well as the number of its larger predators. Points are awarded for nibbling at the tail of a shark, the danger being, naturally, that the shark can whip around and devour the player's fish.

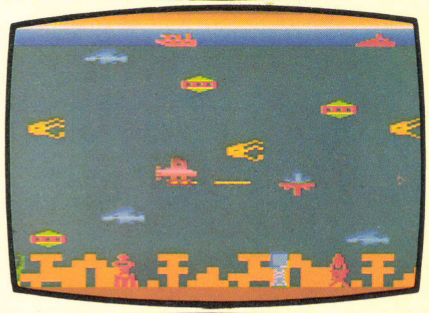
Sound effects, graphics, accelerating game pace and an unobjectionable theme combine to make *Shark! Shark!* one of the finest games available for the Intellivision system. The deep sea ambience is lovingly recreated.

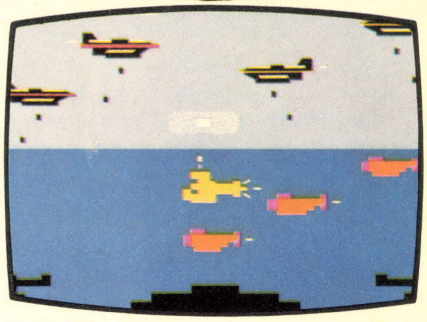
*Dolphin,* from Activision for the 2600, features some of the sweetest sound effects ever created for that system; and the sound effects are crucial to the gameplay. The player controls a dolphin in headlong flight from a malevolent squid. The various obstacles, enemies and allies appear too quickly to react merely visually; the player must heed sonic cues that warn of their approach. Tones high or low indicate the position of breaks in walls of seahorses; helping or hindering waves are prefaced by sound cues,



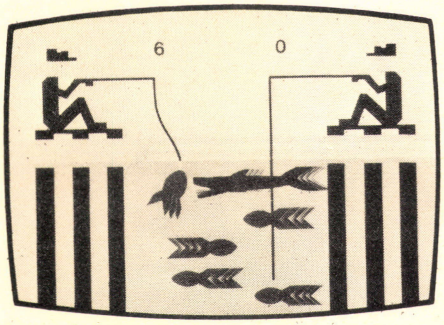



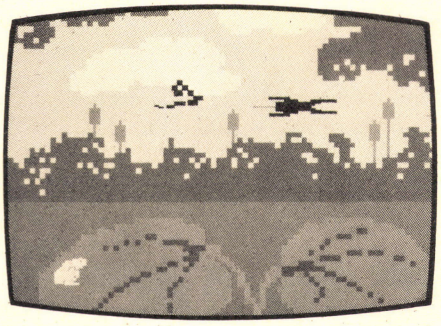
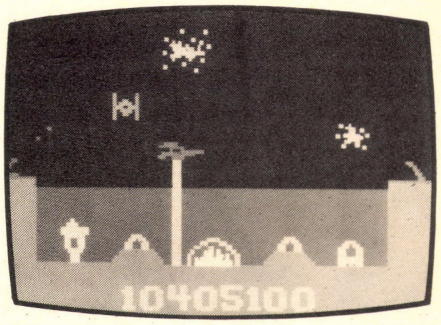






**Dolphin, Frog Pond, Bermuda Triangle,** ***and*** **Polaris** ***demonstrate the diversity of deep sea games.***




***Activision's* Fishing Derby, *Mattel's* Frog Bog, *and Imagic's promised* Atlantis *version for Odyssey.***

as is the appearance of a sea gull. If the player's dolphin touches the sea gull, (s)he can turn on the squid and "zap" it.

*Dolphin* is a highly recommended, high pressure, fast, relentless and yet enjoyable game.

A more mystical view of sea struggles is taken by Imagic in *Fathom. Fathom* is a new, multiscreen game for the 2600 and later for Intellivision. The player controls a seagull which can turn into a dolphin which seeks to rescue a mermaid trapped in a cage at the bottom of the sea. A magical trident is needed to rescue the fair mermaid. The quest for the trident will force the player to encounter such hazards as volcanoes, blackbirds, grasping seaweed and hungry octopi.

Sea games that have nothing to do with mysticism yet everything to do with being blown up, drowned or asphyxiated include *Atlantis, Airlock* and *Bermuda Triangle.*

Highly recommended is Imagic's *Atlantis,* in versions for the 2600, 5200 and Intellivision. *Atlantis* carries the Imagic stamp: vivid colors, wild sound effects, and waves of enemies coming at the player in increasing speeds and fury.

The player controls three guns, shooting upward and diagonally at a fleet of enemy ships which streak horizontally and at lower altitudes and increased velocity with each bomb-dropping pass.

The loss of the fabled city is inevitable, but Imagic has built in an image of hope: at the end of each game, an ark ascends, escaping the holocaust. This is the Cosmic Ark, the adventures of which are detailed in the game of the same name.

Data Age's *Bermuda Triangle* for the 2600 ignores the rich possibilities of that mysterious realm in favor of a straightforward treasure hunt. In the horizontal streak and shoot format, the player controls a submarine. While avoiding sea creatures and alien ships, the player must skim the ocean bottom, retrieve valuable modules, and deliver them to allied ships that patrol the surface. In the heat and speed of play, the treasures can be mistaken for bombs which will destroy the player's sub if it attempts to retrieve them. If any of the sea or alien creatures touches the sub while it is ascending with its cargo, the cargo—and possibly the sub—are lost.

*Bermuda Triangle* is a fast and absorbing game. The sea is thick with swift enemies, making the task plenty difficult. Graphics and sound effects are good.

Also from Data Age, also for the 2600, but an earlier, cruder effort is *Airlock.* The situation is this: your nuclear submarine, disabled and teetering on an undersea ledge, is taking on water. To escape, you must climb either five or ten levels. To climb, you you must retrieve hatch keys, dodge barriers and errant torpedoes, reach an elevator, and climb to the next level—all in ten seconds.

*Airlock's* graphics and sound effects are primitive. Gameplay is so-so. Data Age's early entries inflicted so much damage that later, superior efforts were too late to bail them out. Data Age sank without a trace.

Speaking of which, there are a wealth of sea games that pit man against man, not against nature.

Mattel's *Sea Battle* for Intellivision. A strategy game, the player has a wealth of ship models and weapons with which to penetrate the enemy's harbor. Two screens provide an overall view and a localized view of the battle.

Mattel's *Sub Hunt* for Intellivision. Three screens provide a view of the action: the player controls submarines that must destroy convoys of six ships apiece. Screens include a first person periscope view, a long-range view of the battle, and a closeup of individual confrontations.

Tigervision's *Polaris* for the 2600. In phase one, the player runs horizontally, shooting up at swooping planes. In phase two, an overhead view shows the layout of a minefield (s)he must navigate

*Sub Chase (Armored Encounter)* for Odyssey One. Alternating as the pilot of a plane and the commander of a submarine, the player must destroy the enemy while sparing neutral ships which clumsily intervene.

The mighty film *Jaws* was shortly followed by the pitiful *Frogs* staring Ray Milland. In that spirit, we close, not with the horrors of heavy metal ocean battles or mayhem under the sea, but with the simpler, more sublime (unless you happen to be a fly) traumas of frogs and fishermen.

Activision's *Fishing Derby* for the 2600. Relaxing at the end of a dock, one or two players cast with rod and reel and must pull fish in quickly lest a shark devour their prize.

*Frogger,* from Parker Brothers for the 2600. Help the frog cross the river and the highway without being squashed or carried away. A popular and funky game.

*Frog Bog* from Mattel for Intellivision. A two player game with day or night scenario, players control frogs which leap into the air to snare bugs.

*Frog and Flies* from Mattel for the 2600. A one player game similar to *Frog Bog.*

# MAGNOVOX VS. MATTEL

## *A Blast From the Past*

*by Stephen Bent*

In the mid-1960s, before there was *Pac-Man,* before there was *Space Invaders* or *Breakout* or *Pong,* deep in the bowels of the Massachusetts Institute of Technology, men of science, respected researchers with federal grants, sat in the dim light of their lab. Hunched over a glowing display, they were playing something they called *Space War* with their big, general purpose digital computer.

This arcane activity, well before the dawn of the Atari Age, played a pivotal role recently in litigation involving Mattel and one of the basic patents of modern videogaming.

Hard to believe, you say? Can't imagine how the dead hand of the past could so directly influence industry developments in 1983? Then read on, because the bottom line probably affects who makes what games and how much you'll pay for them.

Let me take you now to those stirring days of yesteryear, when *Space War* represented the state of the art (such as it was) in electronic games. At both M.I.T. and Stanford University in California, computer scientists were using *Space War* sometime prior to 1967 to explore the capabilities of new hardware like Digital Equipment's PDP-1, and, of course, to have a good time. The general purpose computers of that distant period were gargantuan by today's standards—the PDP-1 occupied the volume of a good sized clothes closet—and were certainly slower and less powerful. Still, they were sophisticated enough to handle *Space War,* in which two players, via switches or buttons on a control console, guided "spaceship" symbols across the screen of a cathode ray tube.

In *Space War,* the object was to unleash "torpedos" from one's ships and, ultimately, to destroy an opponent's craft. Each player could rotate his or her ship clockwise or counter clockwise, apply thrust power in any direction, and (by activating the clockwise and counterclockwise rotations simultaneously) send the ship into "hyperspace," that is, cause the ship symbol to disappear from one location on the screen and reappear elsewhere, unpredictably, with a finite risk of destruction in the process.

If all this sounds vaguely like *Asteroids* with *Defender* overtones, consider one major difference between *Space War* and the later-generation games.

The graphics associated with a typical arcade or home videogame these days are the immediate result of what's called a "raster scan," whereby a beam of electrons is swept in a predetermined pattern over the entire screen of a picture tube. The beam starts at one (usually, the top left) corner of the screen and moves horizontally and slightly downward across to the screen's far edge, whereupon it reverses direction back across the screen. After a certain number of these horizontal scans, the beam has progressed to the bottom of the screen, where it's then kicked back up to the top and another cycle of scanning begins.

The raster scan produces a picture by causing phosphor dots embedded in the screen to glow briefly where the beam strikes, leaving blank screen where the beam does not strike. By turning the beam off and on at different points in the raster pattern, an image of bright and dark areas is built up, although so quickly that we perceive only the final result and not the imaging procedure itself.

***"The general purpose computers of the distant past were gargantuan by today's standards and were certainly slower and less powerful."***

*Mattel's Intellivision Entertainment computer system, including keyboard, program expander, game controllers and music synthesizer*

This is essentially the way television pictures have always been produced and, nowadays, virtually all game displays also employ a raster-scan approach. But this was not the case back in 1967, when the designers of *Space War* had taken an entirely different tack by using what is called a "point plotting" or X-Y display instead of a raster.

Basically, they used a computer, with input from the players' control consoles, to direct and redirect the electron beam continuously, first to one screen location, where the beam was turned on and off, then to another locaton not determined in advance. You might expect that a veritable plethora of calculations would have to be made, and instructions generated for the positioning of the electron beam, to afford such free access to the entire playing screen all the time, and you'd be right. That's precisely why the computer wizards at M.I.T. and Stanford needed the latest hardware just to drive *Space War.*

And, with PDP-1's running at about $120,000 a pop in 1967, the folks in white coats can be forgiven if they thought of *Space War* more as a laboratory curiosity than a forerunner of a new form of mass entertainment. They were not alone in this assessment. At about the same time, engineers at an RCA research center in Princeton, New Jersey, were demonstrating the wonders of RCA's Spectra 70/25 computer ( itself a mere $90,000 or so) with an electronic game of pool played on a point plotting display.

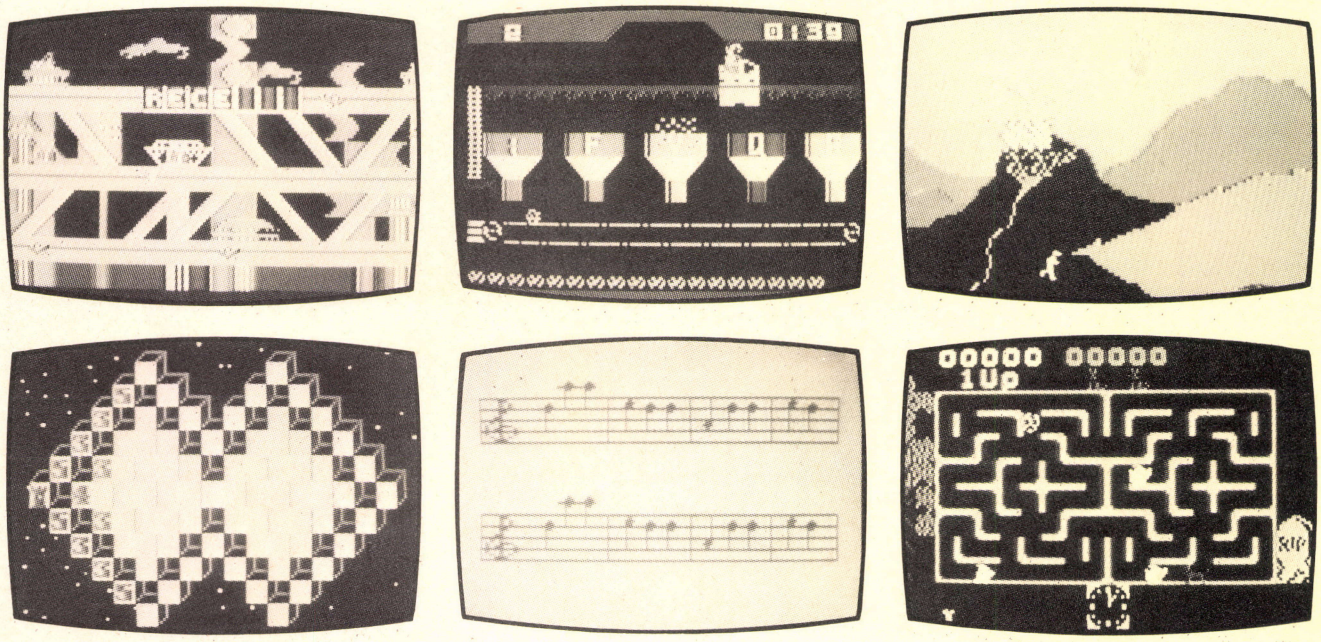
In RCA's pool game, the player initiated a "shot" by touching a light pen to the surface of a picture screen on the side of a "cue ball" symbol opposite the direction the cue ball was to move. The Spectra could handle the calculations for the movements of the cue ball and up to fifteen object "balls," but the action slowed noticeably as more balls became involved in a given shot, taxing Spectra's speed and number-crunching capacity.

The RCA engineers saw no product potential in the pool demonstration and, like the inventors of *Space War,* never dreamed electronic games like theirs would ever amount to much more than research tools.

But they reckoned without a guy named Bill Rusch, who, near the end of 1967, had a bright idea.

Rusch was working for Sanders Associates, a New Hampshire specialty electronics firm, in a research group investigating the possibilities of television games. By June, 1967, the Sanders group had developed its first game and, within a year thereafter, a U.S. patent application claiming what may have been the first modern videogaming apparatus was filed at the Patent and Trademark Office in the name of Ralph H. Baer, one of the group's principals.

The device covered by the Baer application was expressly for use "[i]n combination with a standard television receiver" (a major advance over the *Space War* genre of computer-point plotter arrangements) and included a "control" unit" for generating a "synchronizing signal to synchronize the television raster scan" with signals, representing "dots" on the TV screen, which were also generated by the "control unit." Here, then, was an essential concept: the coupling of a "dot" generator with the standardized raster format of an ordinary TV set, converting the




*Some of the software to be released for Intellivision's computer in 1983: (top, left to right)* **The Jetsons: Way with Words, The Flintstones: Keyboard Fun, Number Jumble.** *(Above)* **Mind Strike, Music Tutor, Scooby Doo.**

televison receiver from a passive to an active instrument wherein signals could be manipulated externally, say, via a joystick.

In his patent application, Baer ruminated on uses for his device, stating that "participants can play a variety of games. By way of example, modified versions of the well-known game of ping-pong may be played by two participants by . . . electronically placing an appropriate mask representing the net upon the screen . . . Three displayed spots represent two paddles and a ball wherein the ball is moved in a particular direction when 'hit' by a paddle."

Voila—the scenario for *Pong* was born!

Rusch, as Baer's coworker at Sanders, was well aware of all this, of course, and he had a notion for further exploiting the timing properties of the TV raster scan to realize the kind of ball-and-paddle game mentioned, but not actually implemented, in the Baer application.

Simply put, it was Rusch's idea to compare "sync pulses" (voltage signals synchronized with, respectively, the horizontal and vertical components of the standard raster scan) with one of two ramp voltages (called "sawtooth" signals) whose slopes were analogs of a dimension of the raster pattern. (By "analogs," I mean that each point along the ramp of the sawtooth waveform corresponds to either the horizontal or vertical location of the electron beam in the raster pattern.)

In this way, Rusch was able, with some rather simple circuits, to place a symbol anywhere within the raster pattern and, by controlling the way in whch the sawtooth signals were manipulated (a joystick could provide the control), move the symbol across the TV screen at will. Perhaps more importantly, it was a relatively simple matter, using Rusch's approach, to test for coincidence between one spot on the screen and another, and to treat such coincidence as a "collision" sending the "hit" symbol careening away from the "hitting" symbol, after the fashion of a ball propelled by a paddle or bat.

Rusch and his employer, Sanders Associates, recognized that the functional elements of many popular games—ping pong, baseball, hockey, and soccer, to name a few—could now readily be simulated on a conventional TV set. Also realizing the enormous commercial potential involved, Sanders filed a patent application in Rusch's name in 1969, hoping to obtain a patent that would permit Sanders to determine who would exploit Rusch's invention over the seventeen year lifetime of the patent.

A patent eventually did issue on the Rusch application, and in 1972 Magnavox Company became Sanders' exclusive licensee under it. That same year, Magnavox introduced the Odyssey Model 1TL 200, the world's first home videogaming system. The Odyssey unit embodied Rusch's approach to utilizing the raster scan and, with the insertion of different metal foil game cards (no game cartridges in those days), could handle tennis, football, hockey, and (of course) ping pong, among others.

Now, the extent of coverage a U.S. patent can provide is determined by the patent's "claims," which are highly refined, precise, encapsulated descriptions of the subject matter the patentee considers his to exclude others from making, using, or selling. Some of the claims in the Rusch patent were very broad indeed. In addition to particular synch pulse/sawtooth generator-and-coincidence-detector circuitry along the lines I've already outlined, Rusch also laid claim to his "television gaming apparatus" with language like the following:

*In combination with a standard television receiver, apparatus for generating symbols upon the screen of the [television] receiver to be manipulated by at leat one participant, comprising: means for generating a hitting symbol, and means for generating a hit symbol including means for ascertaining coincidence between said hitting symbol and said hit symbol and means for*

*Continued on page 65*

# conquering

*In space, no one can hear you scheme.*

# SPACE PANIC

*by Michael J. Sittnick*

ART BY ANGUS McKIE © 1983 YOUNG ARTISTS, LTD.

A space explorer with carnivorous aliens on his tail should have a laser pistol at his disposal. If not a laser, then a stun-gun. Or at the very least a cattle prod. *Something!*

Pity the poor space cadet in Coleco's new *Space Panic.* He is not armed with guns, bombs, or power-pills; he only has a shovel. This creates career difficulties for him, but for the player, *Space Panic* provides a wealth of strategic opportunities and fast and versatile game play.

## OBJECT

The player controls a shovel-toting spaceman trapped in a five-story structure with various space creatures. (S)He must avoid contact with the monsters and destroy them before the spaceman runs out of oxygen.

The spaceman, who is controlled in four directions with the joystick (left, right, up ladders and down ladders), is able to dig holes in the top four floors of the structure. He is also able to fill them up again. Two separate buttons control these functions.

One or two players each have an allotment of four spacemen. A spaceman is lost if he comes in contact with a monster or if he runs out of oxygen in any one screen.

## MONSTERS AND HOLES

Contact with any of the space monsters results in the monster biting the seat of the spaceman's suit, causing him to scream in panic in the vacuum of space. Be especially careful on ladders, where the monsters move quickly, and are closer than they look.

The spaceman's only defense is to dig a hole. If a space monster is trapped in a hole, it will start digging itself out. If the spaceman can fill the hole himself, sealing it, before the creature escapes, the creature falls to the next floor. The impact of the fall is enough to destroy the spaceman's enemies, but here's the rub: a lowly red creature only must fall one level to be destroyed; a green "boss" must fall two levels to be eliminated; finally, a blue "don" must plummet three stories in order to be dispatched.

To drop a monster through more than one floor, the holes must be dug directly over each other. The monster must then be lured into the top hole. When the spaceman refills the top hole, the monster will fall through all the holes. Fortunately, the monsters are generally oblivious to the holes and are predictable as well. If a monster falls through a hole on top and lands on another monster, both monsters are killed, regardless of rank.

In every screen but the first, if a red or green creature falls into a hole and digs itself out before the spaceman can seal the hole, that creature will move up in rank: reds will become green bosses and bosses will become blue dons. Dons are unaffected.

If the spaceman starts to dig a hole and does not finish, the monster will not be trapped; it will have to pause to fill the hole, however. The spaceman cannot run over an incomplete hole. He can jump down into a complete hole and land on the next level unharmed, or through several levels at once. There is a limit to the spaceman's falling, however, and this limitation works as an advantage: the spaceman cannot jump into a hole if it will cause him to land on a monster *unless* he is already falling when the monster enters the hole. Look before you leap.

## OXYGEN

The spaceman has a limited amount of time to kill the monsters before his oxygen runs out. There is an oxygen bar at the top of the screen to warn the player of the amount of oxygen remaining. There is also a numerical counter at the bottom of the screen. Ignore the oxygen bar and use the counter. The bar does not shrink in uniform increments — it begins to shrink slowly and speeds up as the action progresses, which can be deceiving.

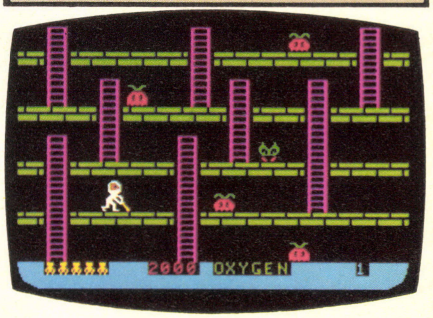
When the counter reaches zero, the spaceman starts turning blue but still has ten or fifteen seconds to complete his task before he suffocates. As in *Donkey Kong's* bonus counter, the player is awarded the time remaining in the counter toward the next screen.

## STRATEGIES

There are eight different ladder patterns in the various *Space Panic* screens, and, although strategies vary accordingly, there are some general guidelines.

In all screens and skill levels, the monsters initially move to the right. They can only change direction emerging from a hole, at a ladder, at the side of the screen, or when colliding with another monster. With this in mind, the player can anticipate their movement.

On earlier screens, be aggressive. Eliminate the creatures as quickly as possible to earn more oxygen points. Later on, you'll need to work quickly




on the red creatures in order to have time to properly dispatch the dons and bosses.

Sometimes the spaceman will be trapped between a red creature on a ladder and a hole. Jump in the hole! The creature will always follow. Climb the ladder and bury the creature.

It is not necessary to press the button repeatedly to dig or fill a hole. Press the button and keep it pressed for rapid action.

Although the amount of oxygen alotted increases in advanced screens, it is consumed faster also. In other words, the spaceman never gets more oxygen, just more points.

Do not leave a lot of holes on the screen. There should never be more than four, and only that many if one of the following two strategies is employed.

### Four Hole Strategy Number One

In screens in which there is a ladder near the center that spans two floors with no other ladders nearby, dig four holes to isolate that ladder from the rest of the gamefield. Dig two holes on the right, two on the left, one on each floor on each side. Make sure that the right side holes are directly aligned; likewise for the left. The vertical lines in the "bricks" will aid you in exactly aligning the holes.

If you employ this method, the monsters will not be able to reach you without falling in a hole. Moreover, if your spaceman waits on the top level, the monsters will most likely fall through one of the topmost holes. This will kill bosses and earn double points for bagging the red creatures.

The number of holes strategically placed increases the likelihood of several monsters being stuck in holes at once.

### Four Hole Strategy Number Two

This method is available in its pure form on only one ladder pattern, but it can be effective in other instances as well. The basic idea is to use the side of the screen to protect the spaceman.

In the ladder pattern in which there is a five story ladder on both sides of the structure, direct the spaceman toward the left ladder (remember, the monsters always start toward the right). Dig holes on the right side of the left ladder on each floor until your spaceman reaches the top level. He should be safe there, unless a monster is on the left side of the ground floor, which is unlikely.

If a monster is headed for one of the bottom two holes, the spaceman should fall through the top floor hole just *before* the monster enters the hole. He should then climb the left ladder to bury the monster *unless* another monster is headed for one of the top two holes. If that is the case, the spaceman should not fall through the top hole but should wait for the monster on the top hole, and quickly bury it so that it lands on the lower monster.

Got that?

## PARTING SHOTS

In many respects, *Space Panic* defies description. Suffice it to say that this is a game that requires *practice*. It will take a number of plays just to be able to dig holes that are in direct vertical alignment.

There is nothing fancy about *Space Panic's* graphics; as is the case with most ColecoVision games, the graphics are pleasant. The sound effects are cute, especially the mellow "bonus music." The game has personality.

The number of games to be released for ColecoVision will grow at a faster clip this year. *Space Panic* should not be overlooked in the shuffle.

# conquering: NO ESCAPE

There is literally no escape from this Imagic cartridge for the Atari 2600. There is no winning it either; you play it until the wrath of the gods wears you down. Can this be construed as a theological statement from Imagic? No, just a game that will remain an exciting challenge from now 'till doomsday.

*by Robert J. Sodaro*

ART © 1983 FERNANDO FERNANDEZ

Jason has stolen the golden fleece from Mount Olympus, and in so doing has angered the mighty Zeus. Therefore, the ruler of the gods has decided to pit this proud mortal against the greatest of challenges: Jason finds himself trapped in the temple of Aphrodite, and assailed by flocks of frenzied furies bombarding him with stones. His only defense is the loose stones on the temple floor.

The maddened furies could easily pulverize our upstart hero into so much heroic pulp if it were not for Jason's own resourcefulness ... and the help of a goddess. Aphrodite, the goddess of love, is not at all pleased that her temple has been profaned by the arrogant Zeus. She has therefore given her aid to Jason.

She has increased Jason's strength so that he is able to throw the stones that litter the floor of the temple all the way up to the roof. When Jason's hurled stone strikes a brick on the roof of the temple, it is knocked loose. When one of the sacred bricks strikes a fury, the monster is destroyed. However, if Jason's stone should strike the fury directly, the fury will divide and become twice as dangerous.

When one wave of furies is eliminated, another, more deadly wave will appear to take up the assault. Jason has also been endowed with an extended lifeline. He begins his trial with four lives, and with every wave he defeats, another life is added, to a maximum of eight. Should Jason lose all of his lives, Aphrodite's temple dissolves, and Jason is carried off in true heroic tradition by Pegasus, the winged steed.

## Scoring

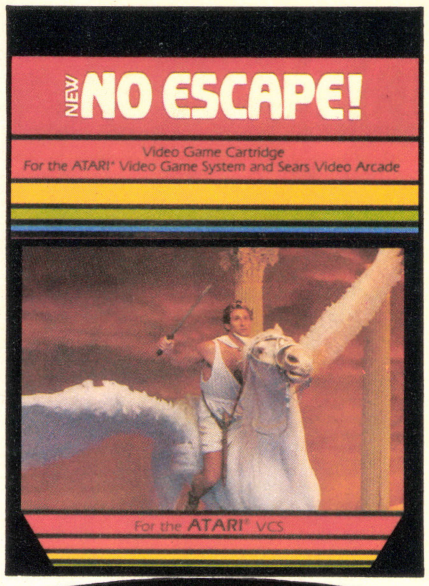
For every fury that is destroyed the player will be awarded two points. Every brick that is left in the roof of the temple will earn the player five points. Ninety nine bonus points are achieved when every brick from waves one and two strikes a fury.

## Control

To assist Jason through his perils you will need your joystick controller.

To start the game you can flip the game reset lever, or push the red fire button. Jason will run to the right or left on the screen when the joystick is moved either right or left. To throw a stone, push the red fire button.

*No Escape* has a new feature for the 2600. If you need to stop the action on



the game, flick the color/black and white switch to the opposite setting. The furies will stop firing. During the pause function, the furies will still march back and forth across the screen. Jason will also move. As soon as he throws a stone, the furies will also commence to drop stones.

## Patterns

As Jason's first trial begins, he is in the center of Aphrodite's temple. The first wave of six furies will appear one by one over his head. This first wave will march back and forth in the air above Jason's head. They will be stacked up, one atop the other, to the roof. This first wave will not drop stones on Jason, but all successive waves will.

The second wave of furies will drop stones and will be moving slightly faster. These first two waves of furies move at a constant speed. Later waves will speed up and slow down.

On these first two waves the furies will march back and forth across the screen, oblivious to all that is going on. They will not attempt to avoid Jason's stones, with this exception: if Jason throws a stone while the furies are still very close to either edge of the temple, and moving away from it, they will reverse direction and head back to the edge. Upon reaching the edge, they will resume their normal pattern.

The third wave of furies will no longer remain in a straight line. In this wave, and all successive waves, they will not only alter speed, but stagger their flight and stone dropping patterns as well. The furies will travel across the screen with the lowest one leading the pack, and the others strung out behind it like a snake. Whenever Jason throws a stone, they will immediately soar back to the point where he is standing, then continue in their original direction.

In the fourth and fifth waves, the furies react much the same way, but add a new wrinkle to their assault. The fury on the bottom (the one dropping the stones) on previous waves would drop the stones just slightly in front or behind itself. In these waves, it will continue to do that, but also toss every third or fourth stone diagonally across the temple. The fury lobs these stones at Jason with uncanny accuracy while traveling in the opposite direction of the throw.

The sixth wave resembles the fourth wave, only at a faster pace. The seventh wave is a repeat of wave number five, yet not only is it faster, but they toss that long bomb more often. With the eighth wave the furies travel in a slightly different pattern. Here they whip back and forth from the top of the screen, with the uppermost fury never quite leaving the center of the screen. Also, they are more accurate with their stones.

In the more advanced levels of game play, the first wave of furies will attempt to stone Jason. They also move faster and the patterns are similar to both the snake and whip-like movements of game one. These furies will also speed up and slow down when Jason throws a stone. In this manner they manage to dodge the falling bricks.

## Strategies

The most important thing to remember in *No Escape* is that when a fury is hit directly with a stone (s)he will split into two, until there is a maximum of six furies. Only a falling brick will destroy a fury, but a fury's stone or a sacred brick will kill Jason. It is also important to note that if Jason is standing still his stone will travel straight up; if he is running the stone will curve up to the roof. The degree of the curve is determined by how far

Jason has run before firing.

There are three basic tactics to be employed in destroying furies. The first one is used in the first two waves of the number one and two games. In these two waves the furies are stacked in straight vertical formation. Therefore the best way to get rid of them is by placing yourself in front of them. This is quite easy to do with a full contingent of furies. When you are down to one or two of the beasts, you will have to range a bit further ahead of them to get on target.

The second strategy is to force the furies to actually run into the falling bricks. This maneuver can be used on all advanced waves. It is easily accomplished by directing Jason to run towards the furies as they are moving away from him. Jason should throw his stone so that it strikes near the center of the roof. As soon as the stone is thrown, turn around and head back to the side. The furies will shoot to where Jason was when he tossed the stone, and then head back in their original direction.

Before the furies actually reach the far wall, Jason should be at the opposite wall. Toss a stone straight up; the furies will again shoot back across the screen. If you time it correctly, one of them will strike the falling brick. Repeat this maneuver until all furies are gone. When you improve at this move you will be able to wipe out two or three furies on one pass, by hitting different points on the roof, and dropping several bricks.

Here, you have to be careful of the furies that are able to throw stones into the corner. Normally they will not be able to reach you in the corner, and it is a good place to hide. However, those furies that can throw for distance will be able to reach you there. To avoid being hit you will have to be very fast and not stay in one place for more than a second (nobody said it would be easy, defying a god).

The third plan of attack is to run back and forth under the furies while throwing stones. It is best used with those waves that move whip-like from the center top of the screen. The only trouble with this mode of attack is that it is too easy to hit the furies themselves, rather than the roof. This is a very scattershot method, and must be used in conjunction with the other tactics mentioned.

Here again the furies will home in on you when you toss stones, and they will alter speed when a stone actually is thrown. In the whip formation waves, the furies are able to toss stones across the screen. Whenever the action becomes too intense in these upper waves, remember, you always have the pause switch for a quick breather.

### *Comment*

This cartridge is faintly reminiscent of both *Breakout* and *Demon Attack*. Gameplay is a blend of both. One delightful surprise is that the furies change form, so that you are not always fighting the same attacker. They appear as mummies, skeletons, dragons, centaurs, and bizarre fish.

The maneuvering and tactics of gameplay are interesting, and should be enough to keep long-time players interested. For, while it is easy enough to pick up strategy, the title of this game is a very accurate description ... there is absolutely no escape from this game.

## THE TRUE MYTH OF JASON AND THE FLEECE!

For the purpose of designing their game *No Escape*, Imagic has taken understandable liberties with the story of Jason and the Golden Fleece. For example, Furies—deities sent down from Olympus to plague or punish mankind—play no part in the Jason saga (Orestes, for one, had to contend with them).

Yet, should anyone care to design them, an entire series of games could be created around the Jason story: they would be the most bloody and perverse videogames in the history of the medium.

Jason was born the rightful heir to the throne of Thessaly. However, when Jason was but a child, his father was deposed by his half-brother, Pelias. Jason escaped the purge and was raised by the centaur, Chiron.

At age twenty, Jason emerged from hiding, intending to retake the throne. First, however, he decided to win public favor by performing a deed worthy of a king: fetching the Golden Fleece from the land of Colchis. Jason commissioned a vessel, called the Argos after its builder. Gathering a crew which included the heroes Hercules, Theseus, Orpheus, and Pollux, Jason set off on his quest.

Leading the Argonauts through perils such as sirens, nymphs, harpies, and the Symplegades, Jason reached Colchis. There he tamed a pair of fire-breathing bulls, slew a dragon, and fought an army of mystic warriors before obtaining the Fleece. In the process, he also captured the heart of the sorceress Medea, the daughter of Colchis' King Aeetes. Medea fled with Jason. They were pursued by the forces of Aeetes, who wanted both daughter and Fleece returned. Medea delayed them by chopping up her half-brother Apsyrtos and scattering the pieces about the water.

Once back in Thesally, Jason learned that Pelias had killed Jason's father. Jason grieved while Medea plotted revenge. She told Pelias' daughter that the ailing king would be restored to health if he jumped into a magic pot filled with boiling water. Convinced, Pelias tried the remedy, and promptly boiled to death. Horrified, the populace ordered Jason and Medea to leave the city.

Settling in Corinth, Jason fell in love with Glauce, the daughter of King Creon. The jealous Medea sent Glauce a poisoned robe which burnt her to death. Medea went on to slit the throats of her own two sons by Jason, murder Creon, and burn down the king's palace. Mounting a chariot drawn by two winged dragons, Medea taunted her anguished husband and rode to Athens. There she settled with King Aigeus until she tried to kill his son Theseus; the King banished her and she returned to Colchis.

As for the tormented Jason, he visited the decaying Argos one day, lay down for a nap, and was killed when a piece of rotted wood fell and struck him.

When the Gods have a contract out on you, there truly is no escape.

# print out

***E.C. Meade looks at books.***

It's astonishing to me how many people continue to put-down videogames while in the same breath exhorting, "Y'oughta read some *books.*"

Well . . . I've been reading books for decades, and loving much of what I read. Classics from the likes of Mann, Fitzgerald and Hawthorne; popular silliness from Doc Savage and Edgar Rice Burroughs.

However, the bulk of the books we get at the *Videogaming Illustrated* offices are enough to send me back to my computer terminal. Talk about uninspired rubbish—which, alas, is what we find ourselves doing yet again.

Vladimir Koziakin, whose Amazeman books we covered in issue four, is back with what publisher Clarkson N. Potter bills as "the first video game in book form." His declaration neatly disregards the "Be an Interplanetary Spy" adventures we covered last month, and which are a much better buy.

Koziakin's *Maze Warps* is a sparse novel whose even sparser plot drops the reader the reader into mazes which must be negotiated before the story can continue.

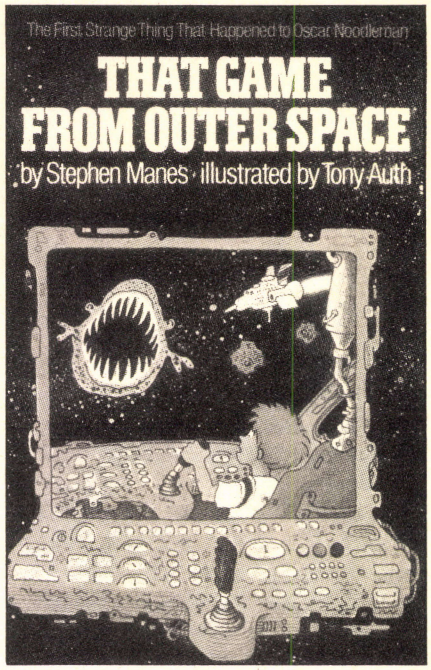
Graphically, *Maze Warps* is superior to the "Be an Interplanetary Spy" books—not surprising, since Koziakin is an artist. Sadly, what he *ain't* is a writer. Try this muddle on for size:

> "When holographic sensors inform Dicto/Galaxis of Venus 11-B and her vector of orbit, he enters his Transdecoder and is instantly irradiated into dreaded signal."

Nice tight writing, eh kiddies? Just right for the juvenile market at which this book is aimed.

There are twenty-four mazes in all. At a $2.50 price tag, that's a dime a maze; check out the sample we've provided and see if you think it's worth it. For my part, I'd rather be playing *Looping.*

Obviously, publishers feel that young kids constitute the bulk of the video/computer book buying market. In addition to the graphic books cited above, we've got two youthful titles from Lodestar and a third from Dutton. Happily, only one is from hunger.




***Stellar cockroaches who invade earth will undoubtedly receive a hostile reception from man and insect.***

The loser is Dutton's *That Game From Outer Space,* another fizzle from the word processor of Stephen Manes. Manes is the author of the *Video Wars* novel which we throttled last month. This time out, he has commendably kept the cutesy and vulgar expressions in check, though he's stil a writer in search of an interesting plot.

What we have here is a cross between *Tron* and *It Came From Outer Space,* as a kid discovers that his favorite new videogame is actually the hobbled interstellar craft of cockroaches from the stars. They enlist his help in repairing the vessel, for which the lad is rewarded with bunches of quarters.

The capacity of computer-oriented fiction to stir a young person's imagination is awesome. However, one wouldn't guess it reading this hackneyed, Saturday morning cartoon stuff. The premise is trite, made worse by a plodding pace. Our ten year old reader was even more bored than I was.

By the by, this book thoughtlessly encourages misogyny by featuring a computer money machine named Mr. Banker. Youngsters reading the book will find their misguided, men-are-better thinking subtly reinforced. Manes is obviously a proponent of progress, since he writes often about computers; this kind of oversight is at once hypocritical and dangerous.

The illustrations by Tony Auth are the book's primary asset. They are, in a word, superb.

*Hello, Mr. Chips* is a better investment, a collection of dozens of computer jokes-cum-groaners for kids. Among them:

* Do computers like human beings? Yes, human beings turn them on.
* Should you be afraid of a computerized dog? No, it's bark is worse than its byte.
* How does a computer die? It comes down with a terminal illness.
* What kind of terminals do sailors use? A Sea-R-T.

Author Ann Bishop also throws in some "Tow Swifties," "Knock-knocks," and "Daffynitions" for good measure.

Even better than the Bishop book is Fred D'ignazio's *Chip Mitchell: the Case of the Stolen Computer Brains.* This book is a selection of computer-oriented mysteries which the reader must solve. Though D'ignazio's plots are occasionally a bit convoluted, readers will have as much fun trying to solve the crimes, etc., as reading the deductive explanations of hero Chip Mitchell.

The D'ignazio book is worth its $8.98 tag, though Bishop's work is a mite steep at the same price.

Next month, I'm confident I'll have all-rave reviews. I'm also confident that I'll be scoring a billion in *Jungle Hunt* and become Prime Minister of Great Britain.

### Musings

My favorite movie is *Tron;* it's my favorite arcade game as well (top score as of last night: 235,898) (*Editor's note: see Rose's memory strategy for* Tron *in this issue's* Championship Videogaming *column*). I'm writing to tell you how interesting and useful I found the April issue of your magazine, not only for the *Tron* article but also for the *Q*BERT* cues. The said issue of *VI* is the first I've purchased, but I believe it will be the first of many, since *VI* appears to represent "Video Victory" as well.

Early one morning, not long ago, I went down to the campus game room for my daily "fix" and found the arcade deserted—but it was far from lifeless. There sat the machines, murmuring to and among themselves, screens vibrant with color and activity as the life (and death) within them proceeded.

The thought came to me suddenly—and not without a shiver of real fear—that I was standing in a house like that described in C.L. Moore's *Jirel Meets Magic*: a nexus of existences, the hub of a galactic wheel, in which every door is a gateway giving on another dimension. A quarter buys us a "token" peek into one or more of these worlds and the opportunity to interact briefly with its inhabitants, but—if we accept the answer to the question "Is there Life on the Other Side of the Screen?" as provided by *Tron*—life in the electronic universes continues perpetually regardless of human behavior. To put it simply, lack of *interaction* with Users does not mean lack of *action* for programs.

Thank you again for the WIZ-dom of your MAGI-zine. In the great electronic arena of life, may your "quarter" of the Game Grid be the "Circuits" Maximus!

Rose Wolf
Binghamton, NY

### See Page Sixty Seven

Could you send me a list with all the names of the cartridges that Atari has released? I know this is asking alot, but if you could please do.

Scott Dechiara
Carrollton, OH

*We have received a number of similar requests. It would be a difficult undertaking because of the sheer number of titles and the complexities of discontinued titles, new titles, and the multi-adaptations to various systems that many games undergo. What we* have *done is create our* Videogame Book of Lists, *which lists all game titles in, we trust, an entertaining and useful fashion.*

### A New Regime?

I was shocked and distressed to hear about Atari's latest attempts to induce wholesale distributors of videogames not to sell any competing brands. I don't blame Parker Brothers for suing them. Atari shouldn't monopolize the industry; all they are doing is making many loyal Atari fans angry at them.

I wish Atari would make versions of their great games for the other big game systems like ColecoVision and Intellivision rather than being so arrogant. With the new Coleco Super Game Module coming out soon, Atari could design versions of their games for that system; they would have some of the best home arcade translations yet. Instead of being left in the dust, they could continue to be at the forefront of popularity . . . and continue to make money.

What ColecoVision or Intellivision owner hasn't dreamed of having a version of Atari's *Battlezone* or *Dig Dug* for their system? I hope Atari is considering this. If not, Coleco may one day rule, and more power to them!

If anyone else feels the way I do, please be sure to write to Atari.

Jeff Silva
Tacoma, WA

***Let me guess . . .Activision!***

### *Tossed in the Bucket*

I enjoy your very colorful and informative magazine. I am a devout fan of ColecoVision; you do an excellent job of covering ColecoVision games. To me, the most important aspect of a videogame magazine is coverage of "future" home videogames; your magazine does the best job of all the magazines in your *Eye On* and *Preview* sections. I would like to see more extensive coverage in these sections and perhaps the elimination of areas such as *Fiction* and *Conquering*.

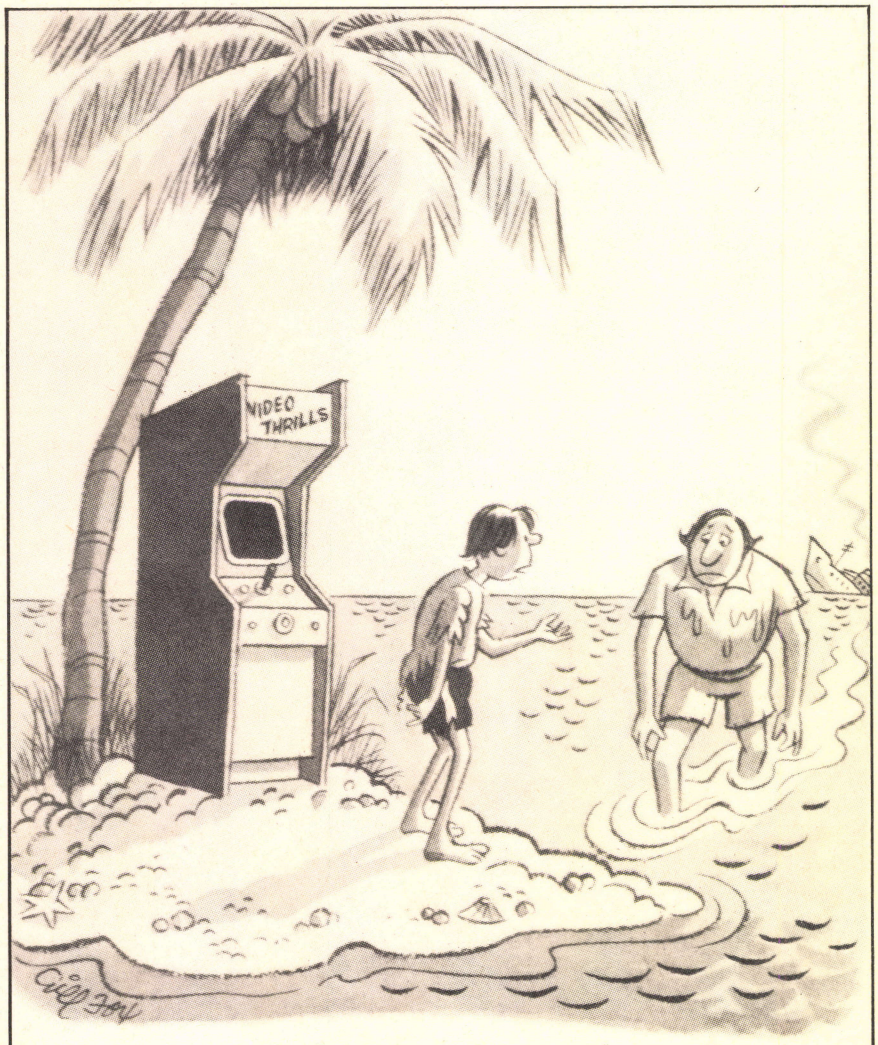
Fiction I consider to be a waste of valuable space which could be used in further game coverage and more *Conquering*. While extended coverage of one game is fine, I think it is much more important to have blanket coverage of many games than concentrated coverage of a few. Likewise, I think the full page artwork that you use could be eliminated in favor of more game pictures. I guess you can see where my interests lie.

One question: What happens when a company like Coleco announces a game (*Ripcord* and *Spectar* were mentioned in one booklet) and then the games are never produced? Are the cartridges they have just tossed in the bucket?

J. Perullo
Revere, MA

*A change in market conditions, a change in title or a total re-think of the design could all contribute to a game's being altered or cancelled. Companies routinely announce a slew of titles before many of them have even begun to be fully programmed.*

*One further contributing factor is contractual difficulties in licensing. An agreement can be reached in principle, work on a game will commence, but when the fine print is read a deal will often come unglued.*




*Got any quarters . . . huh . . . doya, doya?*

### *Astrocontroversy*

In reference to Brett Bilbrey's letter in your July issue in which he scolded you for excluding Astrocade from consideration for your VISTA awards, I believe your explanation begs the question. You say, in effect, that Astrocade's failure to produce many new releases removed them from consideration for awards.

Astrocade's problems in producing new releases have been largely due to poor cash flow. It costs money to make money, and Astrocade simply hasn't had it. Even so, saying that a "lack of activity" is sufficient reason to ignore the system even though they *do* produce is questionable logic. Such policies only serve to preserve the conditions which brought about the exclusion!

I realize that a magazine such as yours must cater to the majority of its purchasers—Atari, Coleco and Intellivision owners for the most part. Nonetheless, if awards are given that lay any claim to objectivity, an outstanding product must be given a chance to compete, even if you feel that the makers of the system have—in general (and in your opinion)—not supported that system adequately. To do otherwise sets up a double standard, where Atari, Coleco etc. products are judged by how well they serve systems, but Astrocade products are excluded from competition, not because of lack of quality, but because there were not enough releases.

If the awards are to be only open to games for the "big four," the readers should be aware that there are other systems being passed by .

Guy W. McLimore, Jr.
Evansville, IN

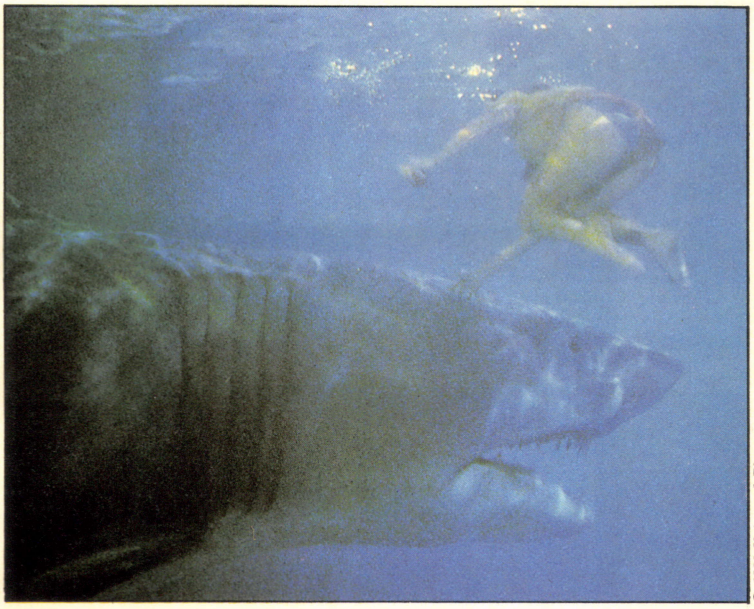
*Your letter makes many valid points, Guy, and we will strive to provide more coverage of the Astrocade system and its games in our pages. However, we stand by our belief that, for the purposes of the 1983 VISTA awards, Astrocade inactivity rendered meaningful judgement impossible. The Tony awards for dramatic excellence, for example, include some categories that are highly refined and specific; often, only one or two Broadway shows qualify. Thus, Tony's are sometimes awarded to inferior productions because of the lack of eligible shows. We are attempting to avoid that pitfall.*

*Continued on page 66*

# media preview

## Motion Pictures

At one point it was going to be a comedy, a parody of the previous two *Jaws* movies entitled *Jaws 3, People 0.* That concept was scrapped, laughter replaced by tears, when the producers noted the success of two popcorn movies released last year: the adventurous *Comin' At Ya* and the horrifying *Friday the Thirteenth Part Three.* Both movies were filmed in 3-D.



© 1983 Universal Pictures

It was a natural: *Jaws 3-D.*

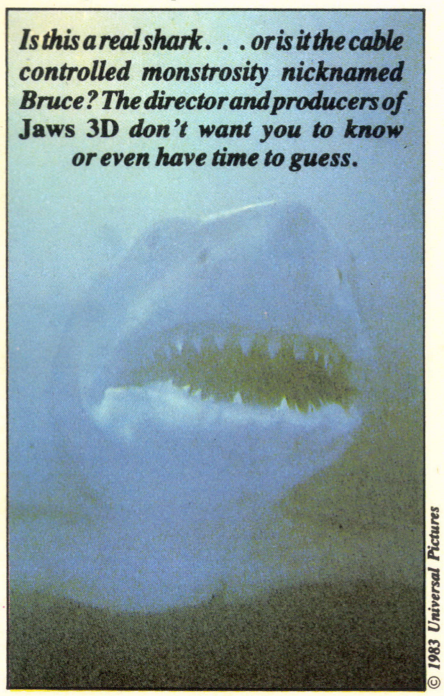
The plot, as in the previous two, is mostly a matter of introducing the shark to its menu and ringing the dinner bell. During a skiing exhibition at a Florida oceanside amusement park, a huge and hungry great white follows the skiers into a waterway that connects the park to the ocean. The shark hides in a maze of saltwater tunnels, a park attraction into which visitors descend in glass tubes to observe the aquatic life. It is up to stars Louis Gossett Jr. (no stranger to underwater films; he lost his head to a moray eel in *The Deep*), Randy Quaid (playing the son of Sherriff Brody of the previous pictures) and Bess Armstrong (*High Road to China*) to destroy the shark.

*Jaws 3-D* is one of many 3-D projects in the works or in the can. Earlier in the summer, Columbia released *Space Hunter,* a futuristic fantasy starring Peter Strauss. And later this year, set in a post-apocalyptic realm of mysticism, low savagery and high technology, *Metalstorm.*

*Metalstorm* concerns Jared-syn, a thug who aspires to be a god. Jared-syn orders his cyclopean and nomad warriors to attack, seize, and suck the life force out of helpless villagers, thus fueling his ancient and precious crystal, which will in turn elevate him to olympian status. Only Jake Dogen, the reluctant hero, is willing to try to stop Jared-syn. The film climaxes in a battle on airborne cycles, during which the combatants drill *through* mountains as well as soar over them.

*Metalstorm* production design and special effects are being handled by MEL, the Makeup Effects Lab. MEL's Doug White and Alan Apone have previously realized makeup and special effects for *Sword and the Sorcerer* ("the sorceress heart gag"), *Prophecy* (one of the baby creatures), *Deadly Eyes* (an upcoming movie in which giant rats are played by lap dogs), and many others. Producer/director Charles Band is already planning several *Metalstorm* sequels/prequels in the Star Wars serialization mode, one of which is provocatively titled *The Psychic Pirate.* And, as president of Wizard Video, Band forsees a number of videogame adaptations of his *Metalstorm* trilogy.

***Is this a real shark. . . or is it the cable controlled monstrosity nicknamed Bruce? The director and producers of* Jaws 3D *don't want you to know or even have time to guess.***



© 1983 Universal Pictures

New technologies have fueled resurgence of interest in 3-D. Headaches—for audiences, producers and theater owners—have been eliminated.

During the 3-D craze of the fifties, the movies were filmed using two separate cameras and were projected by two projectors. The lenses of the 3-D glasses were red and blue. The problems with this system were many: if one of the reels being projected skipped, broke, or halted, synchronization was broken and the illusion ruined. The cost of printing and distributing two reels of film for each theater was astronomical. And finally, the value of red and blue to the eyes is wildly different; audience eyes had to constantly readjust, and headaches resulted.

Today, polarized glasses are used and one reel of film is projected. But before examining the technologies which make that possible, a brief explanation of the 3-D illusion is warranted.

3-D is created by first filming, and then projecting, two separate images, one for each viewer eye. The function of the 3-D glasses is to screen, or block, one of the images from each viewer eye. In this way, the screen and the glasses combine to artificially create con-

vergence. Convergence is the function of the brain which automatically coordinates the images that the left and the right eyes take in independently.

To illustrate the principle, raise your forefinger and hold it at arm's length before you. Close one eye, open it, and close the other. The image of your finger will jump slightly from left to right. Each eye takes in a slightly different image. Now, with both eyes open, focus on the finger. The background image will double. But with one eye closed, the unfocused image will not double. Likewise, with a single, conventional camera lens, there is no illusion of depth.

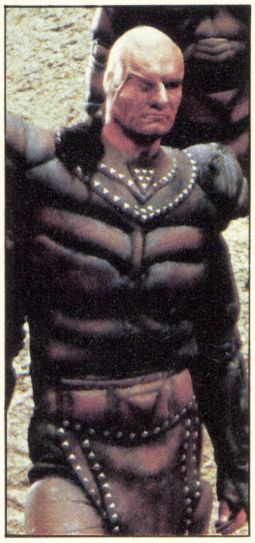
Today, most 3-D film systems employ one of two methods during filming.

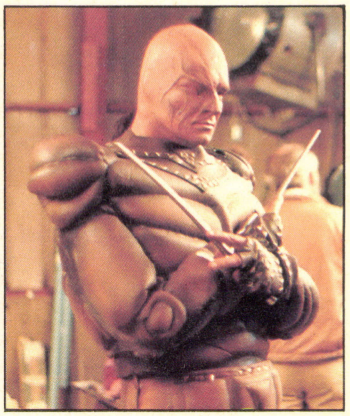
One camera can be used with an image splitting device attached, a prismatic device that is placed directly in front of the lens of an arriflex camera. As a sequence is filmed, each frame of film is divided in two. Steve Miner employed such a system while making *Friday the Thirteenth Part Three.*

Alternatively, Earnest McNabb developed the McNabb system for *Space Hunter.* In this system, two cameras are used. The camera on the right shoots through a "beamsplitter"mirror while the camera on the left, placed at a ninety degree angle, shoots the image reflected in the mirror. Thus, the distance between the two lenses is fixed to correspond to the interocular distance of the human eyes (the two and a half inches between the left and right eyes).

In either case, the two separate images are optically combined on a single strip of film, one image atop the other in each frame. A polarizer filter is attached to the projector while another filter—a pair of punk-style glasses—is given to each moviegoer. But rather than red and blue lenses, the new generation of 3-D glasses are polarized; that is, thin lines have been scratched into the lenses,

© 1982 MGM/UA





©1983 Metalstorm Productions

***At top, a scene from* Wargames, *the sleeper that builds audience suspense with computer precision. At right, employees of the Makeup Effects Lab create creatures and costumes for* Metalstorm, *with the Heavy Metal resplendence that results.***

(horizontally in one lens and vertically in the other) angled to accept one image and cancel the other. The moviegoer sees two individual images. The brain employs the convergence factor. The images are fused, and depth perception has been artificially created.

Two quick computerfilm notes:

Those of our readers who have not seen *War Games* should do so before it disappears. Despite an early summer crowded with megamovies such as *Return of the Jedi* and *Superman III,* War Games appears to be a hit. Deservedly so. Even with no less than four doomsday scenarios dramatized and an important anti-nuclear weapons message to deliver, the movie manages to be upbeat.

And if you think the idea of a computer directing a response to a nuclear attack is ridiculous, think again. The Pentagon is already discussing a computer dictated "automatic response" to nuclear attack . . . humans being so slow.

Recently announced from the New Pictures Group and MGM/UA: *Bytes,* a comedy about a summer computer camp for kids. New Pictures executive Doug Curtis was quoted in *Variety* describing *Bytes* as a movie concerning "the future nerds of the world."

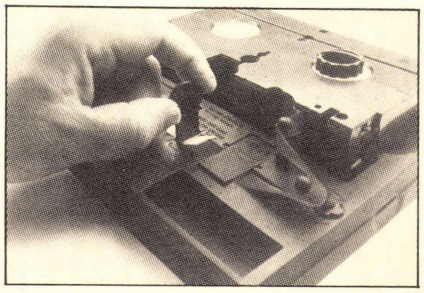
An autobiographical piece, Mister Curtis?

## RADIO

Listen up, nerds. *Videogaming Illustrated* provides comprehensive coverage of the videogame field, but for those of you who subscribe to the country western adage "too much ain't enough," Audio Inventions is presenting *The Screen Fiend.*

Making its maiden broadcast on June first, *The Screen Fiend* is described as America's first and only nationwide radio feature on the videogame industry. The sixty second program, broadcast five days a week, will present cartridge reviews and software accessory and arcade news. Todd Barkum is the show's creator and narrator and he has fashioned the show with humor, sound effects, and a lightning-fast pace.

*The Screen Fiend* will air on local top forty and rock stations.



***Video recorders have editing capability in the pause button for certain situations, but for repair, the Tape Mender will be handy.***

## HOME VIDEO

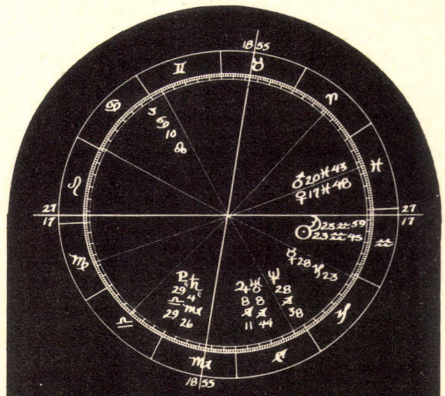
On the market for months, but still worth noting, is the VideoMate Tape-Mender manufactured by Total Video Supply of San Diego. With prerecorded video cassettes selling for anywhere from thirty five to eighty dollars, a means by which a mangled tape can be repaired is a welcome item.

The Tape-Mender kit contains a work station which holds a VHS or Beta tape with its door open. Pins, guided by a hub drive unit, guide the damaged tape into a clamping unit which correctly positions the tape on an alignment track. Shears or a razor blade, which are included in the kit, are used to cut the tape, adhesive tabs are applied to mend it . . . and the copy of *Mars Needs Women* starring Tommy Kirk that you impulsively dropkicked into the garbage is ready to roll once more.

Total Video Supply also manufactures the Stereo Adaptor, Model SA-100, which adapts television mono signals to play through home stereo systems with no additional wiring required. A single lead from the adaptor plugs into most TV earphone jacks, and then twin leads are connected to the stereo amplifier auxilliary jacks.

*Mars Needs Women* never sounded so good.

***With many new video cassettes recorded in stereo, a steroe adaptor is an idea whose time has come.***

**Astrology has captured the interest of great minds — the likes of Pythagoras, Ptolemy, Roger Bacon, Kepler, and Jung throughout the ages. There must be more to astrology than the popular daily newspaper sun sign horoscopes.**

**Now you can find out for yourself by ordering your own computer calculated birth chart. Find out your moon sign; learn what your rising sign is. Become aware of the conflicts, challenges, and potential pictured in symbolic form by your birth chart. This could very well be**

**THE ULTIMATE CHALLENGE**

**Use the coupon below to order your chart. Attach a separate sheet for additional charts you wish to order. Included with each order is a glyph interpretation key and a reference list of the more valuable books on the subject readily available at libraries and booksellers.**

**Mail to:**
**GEO-CENTRIC COMPUTING**
**107 So. Wallace**
**Bozeman, Montana, 59715**
**I enclose $2.00 for each birth chart.**

NAME _____

ADDRESS _____

CITY _____

STATE _____

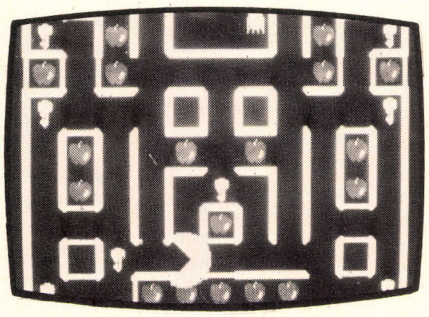
ZIP _____

BIRTHDATE _____

PLACE _____

TIME OF BIRTH _____
(from birth certificate; if time unknown, we will use noon.)

# championship videogaming



### *Super Pac-Man*

To the Editor:

Though the basics remain the same, there are enough variables in *Super Pac-Man* to make the game most appetizing. Here are a few strategies I picked up that improved my score.

Energizers, as well as fruit, are caged in locked corridors. The keys which are spread across the screen unlock doors to these corridors. Obviously, then, begin by eating as many keys as possible before gobbling down any fruit. When a congeries of ghosts are upon you, lead them into an unlocked corner, where you can quickly swallow an energizer, thus turning the tables.

The large, pulsating energizers will turn regulation Pac into Super-Pac. When in this state, Pac can pass through locked corridors as well as ghosts. However, the super-energizers are best saved for the completion of a screen.

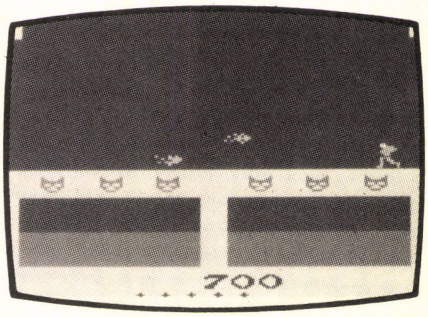
Always hold down the super-speed button when Pac is in a super state. This will enable him to move even more quickly than during a "regular" super state (which is in itself fast, since Pac-Man becomes many times his normal size and thereby takes up more room on the screen).

Eating a regular energizer during the super-spell will enable the Super-Pac to gobble ghosts for *double* the amount of normal points. Plan ahead whenever possible, in order to grab a super-energizer and then a regular energizer, allowing this play to be made.

Every third screen in *Super Pac-Man* is a bonus screen. Pac comes complete in super-outfit at the start of these bonus rounds, in which the object is to eat as many edibles as possible before the timer (located at the top of the screen) reaches zero. Naturally, you should hold down the super-speed button during each such bonus round.

As in other *Pac-Man* games, bonus objects will occasionally flash on the *Super Pac-Man* screen. A star will appear between the two center boxes; eating it is worth bonus points. In addition, whenever the surrounding boxes flash identical objects, the star between them is worth *extra* bonus points. Be on the lookout; but don't get super-excited and lose a game life over it!

—Dale Locke
Boston, MA




### *Dragonfire*

To the Editor:

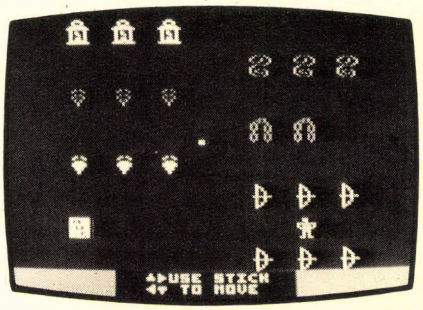
I discovered a peculiarity in Imagic's *Dragonfire* when I was playing it with my brother. Sometimes I think it must be a defect in my cartridge.

When you have collected all of the treasure out of the treasure room, you are supposed to exit through a door at the left top of the screen; it is then the next player's turn.

I found that, after all the treasure was gone, if I positioned my figure at the left side of the door and let the dragon hit my figure in the legs with a fireball, when I exited through the door . . . one of my opponent's figures was eliminated! If the dragon did not shoot at my figure, I positioned it on the right side of the screen and cruised it slowly to the left, drawing the dragon's fire, so to speak. In this way I decimated my brother's store of lives while only injuring my own slightly.

My high score is *Dragonfire* is 13,810 on the 2600 version.

—J.R. Jackson
Neosha, MS




### *Dragonstomper*

To the Editor:

In the *Preview* column in your June issue, E.C. Meade complained that she had a hard time playing Starpath's *Dragonstomper*. This is such a great game that it deserves better from your reviewer.

Here are some tips for the utterly perplexed; be mindful that reading these strategies may well ruin the surprise and discovery element of the game for those with a supercharger and a *Dragonstomper* cassette.

In the first screen, go to the right and get the shield from the temple. This will add to your dexterity but is not good for much else, except selling it in the village. But remember: the more strength and dexterity you possess, the easier it will be to kill your enemies. The maximum strength and dexterity units you can possess are around fifty in number. Crosses, charms, potions, rings, staffs etc. will either increase or decrease your powers. The wonderful thing about this game is that it changes each time you load it into the 2600.

When golems, monkeys, spiders or whatever attack you, fight them. You have the option of running, but running will gain you nothing.

Once you have built your gold supply to around two thousand pieces, you are ready to cross the bridge using the paper as I.D. Don't try to do combat with the bridge guard. You can't win. Bribing him may work, but you'll only deplete your money supply. No. It's got to be the I.D. paper.

Now that you are in game two, the Oppressed Village, trade all the possessions you have. They will do you no good in slaying the dragon. Buy Vitamins in the Hospital (to help

you regain strength against the dragon), rope and longbow in the trade shop, and the following from the Magic Shop: vision, blast, stun, unlock (very important; it will give you access to the scroll), amulet and protect. You must also hire three allies. If the three warriors want more gold pieces than you have left, try buying rubies and sapphires elsewhere, and offer them to the Warriors.

Now you are ready to enter the cave, and embark upon the most dangerous part of the adventure.

In game three, the traps, bones and poison darts are not fatal but will rob you of your strength. Avoid them as best you can and enter the dragon's cave.

Blast, along with the longbow and the warriors, might kill the dragon outright, and you will score an easy win. This is unlikely, however. Use your vision to see the traps ahead of time. "Protect" will help you save some strength, and vitamins will restore it if the dragon zaps you. Try deploying your warriors (suckers!) and while the dragon is busy with them try to unlock the door and reach the amulet and in that way secure your victory.

—Ron Rampolla
Flushing, NY

### *Tron*

To the Editor:

Once you've developed a workable strategy for *Tron* and have become familiar with a specific machine, use the eight-second pause between bases to mentally review the upcoming games. Try any memory device—nicknames, lists, mind's-eye maps—whatever works best for you.

For instance, after completing PL1 and before commencing PASCAL, I say to myself, "PASCAL is the four R's: right-hand hook (lightcycles), right-hand cylinder (MCP Cone), Recognizers (tank maze), and 'Rockettes' (grid bugs—the double file that comes out kickin')."

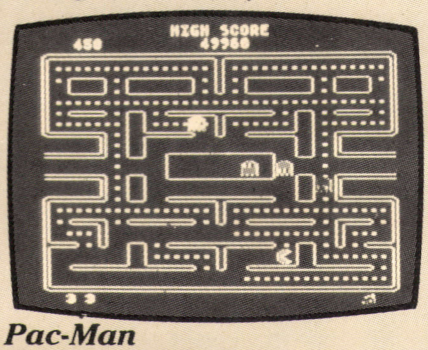
These reviews are not only useful, but User-ful: it's almost impossible to get top ranking on *Tron* without advance strategy. While you may—and indeed should—be able to freestyle on the Tanks/Recos and the grid bugs, you *must* know ahead of time from which direction the cone and the cycles are coming; a fraction of a second's indecision on either event can bring your Warrior to the END OF (LIFE) LINE.

Rose Wolf
Binghamton, NY

*Send your strategies to Championship Videogaming, Videogaming Illustrated, 45 W.34th St., Room 407, NY, NY 10001*

# taking it to the streets

*Roving reporter Randy Palmer visited a number of New York arcades and elicited the following strategy tips:*




### *Pac-Man*

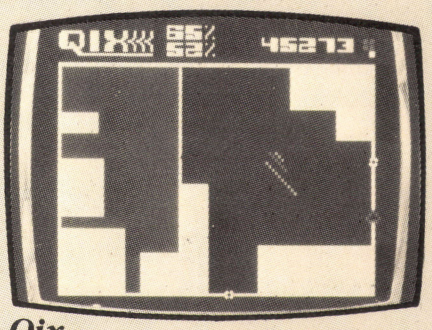
"Even with Ms., Super, Plus and baby Pac, the original Pac-Man still stimulates me to find new strategies like the following. Sometimes the player will get trapped in a corner of the screen, as one Ghost descends vertically and another is traveling horizontally. Rather than 'give up,' as I've seen many players do, *watch the Ghosts' eyes intently.* If one *looks away* from your Pac-Man, you can actually move *through* that Ghost! So don't give up the ghost when you're being cornered by them!"

—Rick Millar

### *Defender and Stargate*

"*If* you become trapped and *must* resort to using the game's Hyperspace button, there is one thing you can do to try to save your ship upon re-entry into 'normal' space: as soon as you press Hyperspace, look immediately at the Scanner. Your ship is represented on the Scanner by a white diamond-shaped object. It will appear on the Scanner *before* the real ship appears on the main videoscreen. If you see the white diamond 'ship indicator' appear amidst a tangle of aliens (each of which has its own Scanner symbol), *immediately* depress Smart Bomb as your ship reintegrates on the main screen. That will destroy all the aliens, of course, *before* they bombard you with their own bombs. "Additionally, in *Stargate,* this trick works even better. Perform the same maneuver, but for complete protection, hold down the Inviso button for a few seconds just as you've detonated a Smart Bomb."

—Dan Debois




### *Qix*

"When closing off a portion of the screen, it might happen that your marker will collide with an approaching Spark. If you're able to pre-determine that this will happen, simply cease 'drawing' your line . . . but only briefly (just long enough to avert collision with a Spark), otherwise the Fuse will ignite."

—Don Dellon

### *Zaxxon*

In *Zaxxon,* using the firing button *instead* of the joystick trigger allows you to get off more shots in a short amount of time."

—Leon L.L. Lasser

# Yours Free From E.T.™*

## With Membership

**Get Exclusive 5 Minute Record "E.T. Speaks" When You Join His Official E.T. Fan Club**

Listen to E.T.™ as he speaks his first words, "phone home," "be good," and "ouch," plus other movie highlights. You can't get this special record anywhere else. It's yours FREE as a member of E.T.'s brand new, Official E.T. Fan Club.

### You also get:

- Big E.T. Color Photo—you'll love this 8" x 10" prize photo of E.T. hugging his friend Elliott (ready for framing).
- E.T. Coloring Poster—detailed art poster of E.T. The Extra-Terrestrial from one of the most exciting scenes in the movie.
- Official Membership Certificate—featuring a color photo of E.T. and Elliott and bicycle, complete with E.T.'s footprint signature.
- Fan Club Membership Card—an exact replica of the stage pass worn by the "E.T." cast and crew.

### PLUS MORE

You also get 4 fun and adventure-filled issues of the E.T. Fan Club Newsletter. Each quarterly issue is chock full of artwork, news and photos of E.T., Elliott, his family and friends...letting you relive the film's unforgettable moments and your favorite scenes. Enjoy "insider" interviews with E.T.'s Director Steven Spielberg, the cast and crew. Go behind the scenes of the "E.T." movie studio...learn the special effects secrets and other movie magic. Find out things about E.T. only his closest friends know. You also enjoy the first chance to get limited Fan Club collectors items...be among the very first to hear about new Steven Spielberg movies...plus much more!

**HE WANTS TO BE YOUR FRIEND**

Send to : OFFICIAL E.T. FAN CLUB
P.O. BOX E.T. DEPT. 2 MT. MORRIS, IL 61054

E.T.™ FAN CLUB OFFICIAL

☐ **Yes!** I want the FREE "E.T. SPEAKS" Record and send me my big, special E.T. Fan Club membership kit. Enclosed is a check or money order for $6 for my full one-year membership and benefits. ($9 in Canada or foreign—U.S. funds only.)

(Please Print Clearly)

Name _____

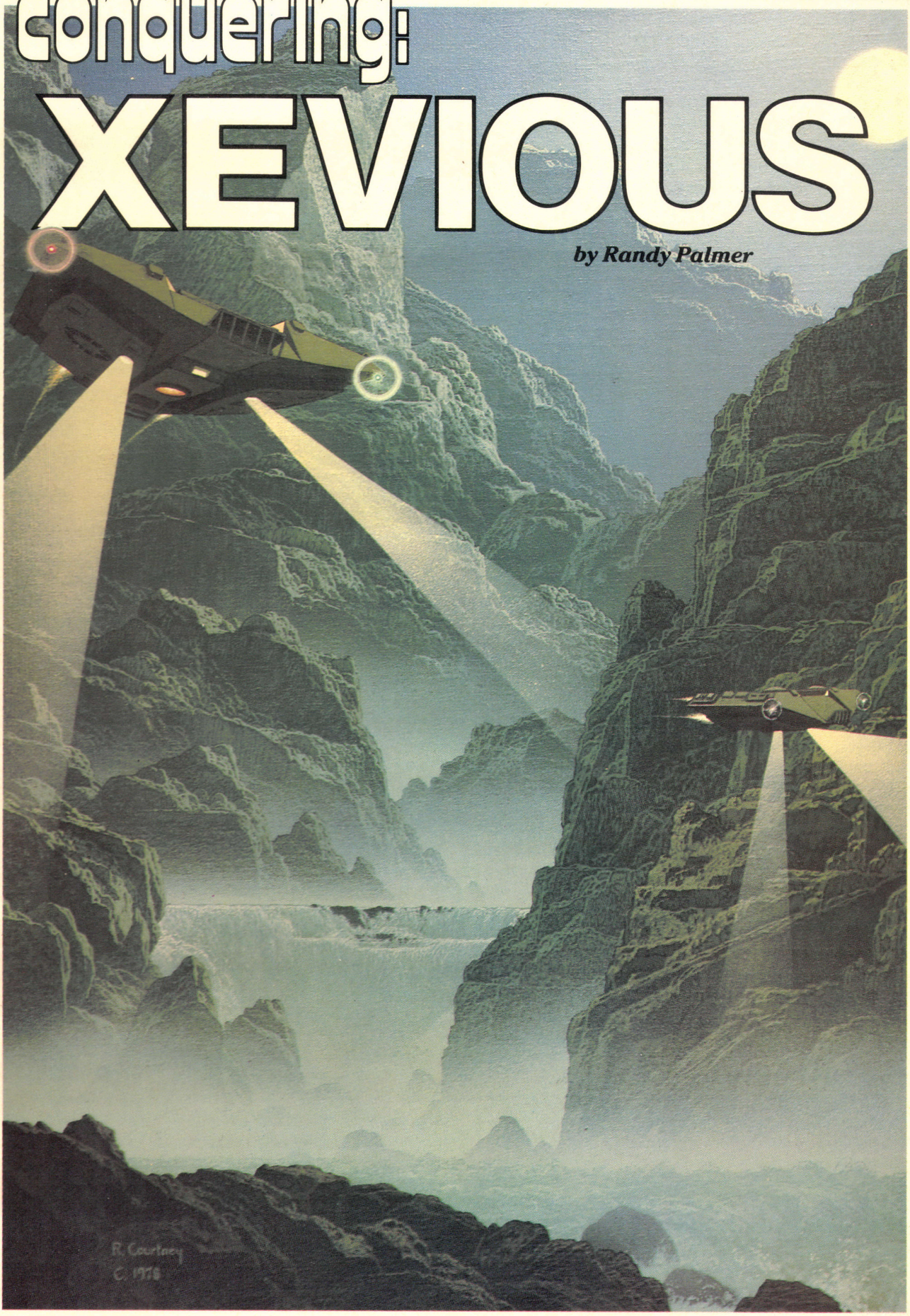
Address _____

City _____ State _____ Zip _____

Please send no cash. Allow 4-8 weeks delivery. Money Back Guarantee. * a trademark of and licensed by Universal City Studios, Inc.
© 1982 Universal City Studios, Inc. All rights reserved.

# conquering: XEVIOUS

*by Randy Palmer*




ART ©1983 RICHARD COURTNEY

Is the term "xevious" an amalgam of "exciting" and "devious?" It could be. *Xevious* is both of those. It's also fun, challenging, and one of the best new games of the year.

The player controls a ship called a Solvalou, which is viewed from above as it flies along an earth-like terrain scouting enemy obstacles. These obstacles — there are twenty-five in all — are either land or air-based; and on occasion, some of the land-based obstacles become mobile.

A joystick allows for movement of the Solvalou in all directions (although it must always fly forward, with its cannon pointing straight ahead). To fend off enemies, the player has at his or her fingertips two control buttons: a zapper, for air targets only; and a blaster, for all the ground targets.

Located several inches in front of the Solvalou is a circular, long-range scope for sighting targets. This sight is used only when destroying the ground targets. It can be disregarded during air battles.

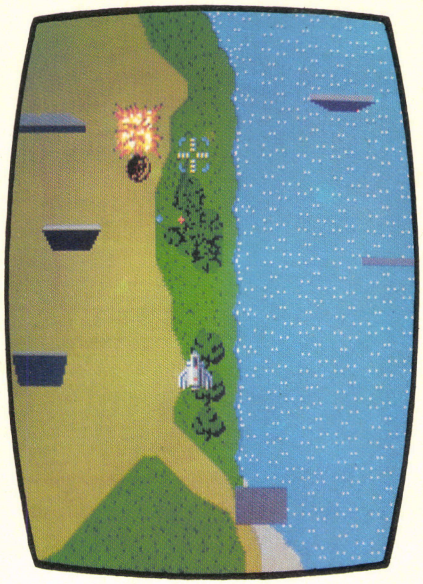
### Learn The Landscape

An important key to claiming high scores on *Xevious* is to learn the landscape. Knowing in advance whether your Solvalou is approaching dirt roads, green flatlands, rivers or circular "airstrips" (on which is often sketched the figure of a Phoenix) will allow you to anticipate whether you are about to sight a Sol Citadel, a Logram Sphere Station, or merely a fleet of Toroids.

Be forewarned: the landscape in *Xevious* is vast, and its memorization won't come easily. Nevertheless, keep in mind that once you know what's coming, your score will improve dramatically. Don't divert your attention away from the main action; but try to mentally note the positions of landmarks when it becomes reasonably safe to do so. And make use of such knowledge in subsequent games.

### Powerful Positioning

The way in which players position their Solvalou is another key element in survival strategy in *Xevious*. While it may be fine to position your Solvalou ship toward the top of the video screen at the beginning of a game, players will find that, more often than not, defensive strategy calls for the Solvalou to take a position approximately three-quarters of the way *down* from the screen's top. At times,



the ship will perform best at the extreme right or left edges of the playfield.

As a general rule, keep the Solvalou positioned near center-screen, in the bottom third of the screen. *Never* allow it to move into a corner (which can, and usually does, insure a quick death), and also keep it away from the bottom edge of the screen. The enemies in *Xevious* force the player to allow room for moving the ship out of harm's way at a moment's notice, so give yourself leeway to pull back *and* scoot to the sides.

### Air Borne Obstacles

Recall that only the zapper button is used in dispatching flying enemies. Pressing the wrong button at the wrong time is a sure way to court disaster in *Xevious!* While there will be times during gameplay that players will be called upon to press the zapper and blaster buttons simultaneously, the alien attackers listed here call for use of the zapper *only.*

A fleet of Toroids will appear first on-screen. The initial four or five groups won't shoot any death-charges your way, so angling your Solvalou near the top of the screen will allow for extinction of the entire fleet. After that, pull back on the ship because the Toroids *will* begin firing. Even though the zapper allows for repeat-fire, players can pull more rapid firepower from it by continually tapping it.

The Toroid fleet will be followed by a scout ship called Torkam. Blast it on sight. Atari showed no mercy in designing the game; you should show none in playing it.

The Zoshi craft are swift and dangerous. Many times they will congregate and hover over a land obstacle, waiting for the player to line up the Solvalou sighting mechanism, then shower the ship with bombs. Because of this, players should strive to eliminate *every* Zoshi craft — even if it means passing up a land target.

While Zoshi craft may arrive on screen grouped together, inevitably one or more will scoot away to either side and try to knock out the player's Solvalou from a lateral angle. When this happens, the player *must* move the Solvalou out of the line of fire. (Remember: there is no way to turn the firing mechanism of the ship; it shoots only vertically.) Of course this can be extremely difficult, especially if other Zoshi ships are still alive and firing from in front of the Solvalou.

If the player can outmaneuver the Zoshi squads without losing a game life, any that are passed will also fire at the *rear* of the Solvalou as they move off screen! Once again, it's up to the player to move out of the line of fire. Keep your eyes on the Zoshi craft that have survived your Solvalou's shells, but don't let up on the zapper, since new enemies will be entering play from the top and sides of the screen as the Zoshis vanish from sight below.

The Giddio Spario is, in *Xevious* terms, an "energy blast." These hailstone-like figures appear on screen very quickly and, while they won't zero-in on the Solvalou, there will be so many coming at you that constant shifting of the joystick combined with zapper fire action is required.

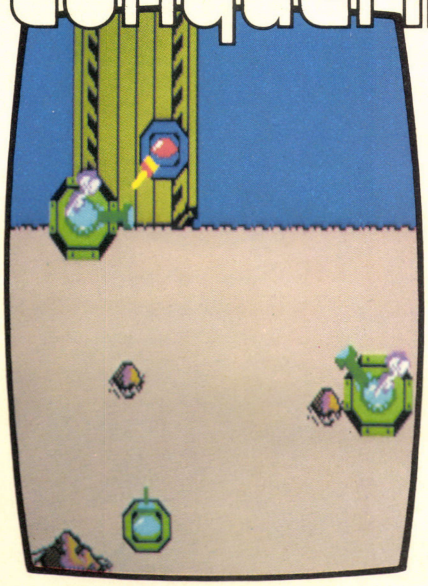
More deadly than any Giddio Spario, though, is the Zakato. Zakatos materialize as small black spheres which can move in any direction. They appear usually in groups of threes near the middle and sides of the screen. Defend your Solvalou as you would when confronted by the Zoshi squads. Zakatos can, and will, sneak behind your ship and fire at it. Once you have learned the *Xevious* sequence (by studying the landscape) and can anticipate materialization of Zakato energy spheres, position the Solvalou near (but not at) the bottom of the screen and scoot rapidly across it while zapping the Zakatos as soon as they appear.

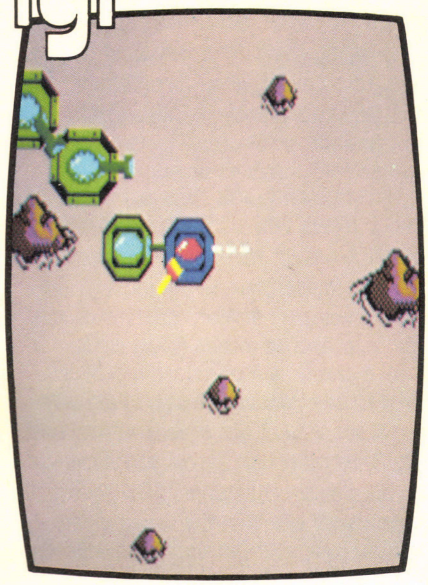
The Brag Zakato is akin to a regular Zakato, but will release a larger quantity of energy spheres. Its brother, the Garu Zakato, will literally bombard the

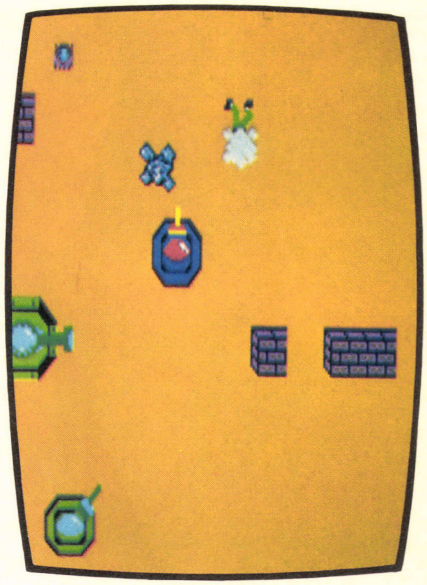
*continued on page 64.*

# conquering:

*Arcade Game Strategies by Randy Palmer*







## FRONT LINE

The player controls a lone soldier (via an eight-directional joystick) who must confront enemy troops on territory dotted with land mines, foxholes and tank battalions.

The soldier is equipped with a gun and a quantity of grenades. The player must move swiftly when aiming the gun to fire at the enemy: the aim control is difficult to use since it will not rotate freely; it is notched, allowing the player to aim only in eight directions.

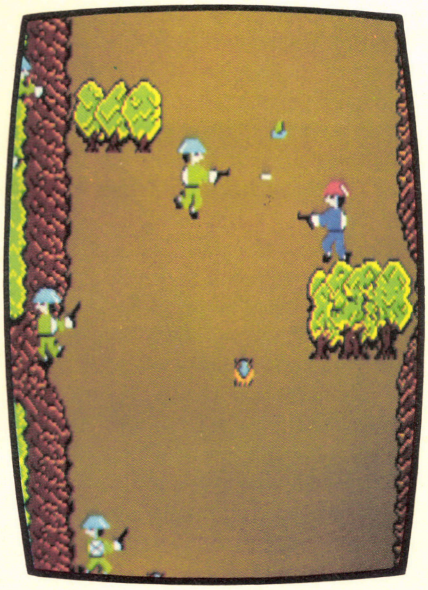
Along the route, players may attempt to protect their soldier from enemy gunfire by hiding behind bushes and, on occasion, brick walls. This trick, however, will cause some of the front line troops to edge away from the main action and reposition themselves in the shrubbery to the soldier's sides. This can be disastrous for players who only keep their eyes straight ahead. Be ready to turn the control knob quickly to kill off any strays who try to sneak away for such surprise attacks; your enemy is persistent.

Tossing a grenade can dispatch a quantity of enemy soldiers, if it detonates in the right place. Note that a grenade can not be thrown in a straight line; it "falls" along a curved path—an approximate forty-five degree angle. Therefore to make sure the grenade does the greatest possible damage, position your soldier correctly: above and to one side of enemy troops.

Snipers will occasionally hide in trees along the warpath. They can be killed with a direct gunshot, and a grenade will do the trick as well. The grenade (since it cannot travel up) should hit the bottom of the tree trunk to fell the sniper.

After you fire, move immediately whether you have hit your target or not because all return fire will be directed at that position. If you miss, you can swing back and try to hit that opponent again.

The mines scattered along the ground are deadly, of course, to you, the player. But they can also be just as deadly to the enemy troops. If you spot several gathered around a mine, a grenade will do them all in if it hits the mine spot-on.



**Front Line** ***action, above and top.***

As play progresses, the formidable tanks will approach. These tanks can be destroyed with a grenade. However, the grenade action button will also allow your soldier to climb aboard his own (blue) tank.

Your tank has more firepower, but it also remains a larger target. Should an enemy soldier or tank fire at it, hit the action button a second time to escape the tank (which will blow up, and carry off one game life if you allow your soldier to remain inside).

During tank travel, be on the lookout for foxholes. Lone enemy soldiers can spring up abruptly and loft a grenade of their own in your direction, so be prepared to disembark at a moment's notice.

Before you can reach the fortress, you must cross a very narrow bridge. You must keep your gun turret aimed forward while crossing the bridge, but having crossed it, turn the turret immediately because the enemy will attack your flank.

After traversing the bridge, the enemy fortress will be in your sights. The fortress *cannot* be destroyed while your soldier is in the tank; only a grenade will do the trick.

If you can bypass the fortress while still riding the tank without doing yourself serious harm, do so. Then jump out and toss the grenade. Otherwise your soldier will have to bypass the fortress on foot—a perilous situation indeed! Keep in mind, however, that the walls and brush can provide temporary shelter for the soldier as well as the tank.

The videoscreen is divided into three segments, each serving a different function. The top left quarter of the screen displays amount of warp drive, photon bombs and shields the player possesses at any given moment. The top right portion is a bird's-eye view of the "universe" of the *Star Trek* game, showing the position of the Starship *Enterprise,* enemy Klingon ships and exploding mines. The entire bottom half of the screen is a close-up view of the immediate area surrounding the *Enterprise,* seen from the hypothetical commander's point-of-view.

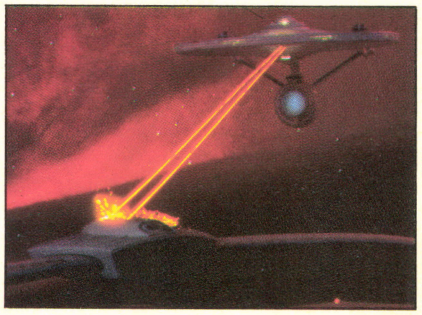
To play your best, maintain eye contact at all times with the "scanner"-type overview. When sighting only from the commander's p.o.v., little can be accomplished.

Starbases are to be protected first and foremost. The red Klingon ships will attempt to destroy these bases by firing at them repeatedly. Since the Starbases are, among other things, a source of points for the player, always move to destroy the red Klingons first.

The purple Klingons will fire at the player's *Enterprise.* These are most easily defeated by flying parallel (as opposed to head-on) with them, then quickly spinning the control knob to turn the *Enterprise.* By doing this the player can avoid enemy fire and obliterate the Klingons from the side.

Be on the lookout for any white Klingon ships — the most deadly of all. The white Klingons will head directly for the *Enterprise* and ram it. They move very fast and are difficult to hit. However, since they appear only when the player is taking too long to complete any given wave (much like *Defender's* Baiters), they can usually be avoided by ending waves as quickly as possible.

In addition to the Klingon ship battles, players will also be required to defeat Nomad during special waves. Nomad (appearing as a yellow point on the scanner-screen) darts through space, planting mines (blue dots). Mines can be set off when a player fires at one, which may (and usually does) set off a chain reaction, in which the *Enterprise* can be caught. Destroy Nomad as soon as possible by twisting the control knob in the appropriate direction just after Nomad has planted the first mine. Fire immediately, and it can be destroyed with little trouble.



© 1982 Paramount Pictures

The blue diamond-shaped Anti-Matter Saucer is another object in *Star Trek* which can cause players much distress. These Saucers, should they brush against the *Enterprise,* will cling to it, robbing the ship of its warp drive capability. Blast Anti-Matter Saucers *into* anti-matter; or thrust (hyperdrive) the *Enterprise* away from its vicinity.

Your photon bombs should be saved for clusters of purple Klingon ships. Keep your distance from the enemy ships and fire a photon; it has the power to destroy several at once. Don't waste photon bombs on single enemy ships.

Docking with a Starbase replenishes the *Enterprise's* shields, photons and warp drive by one unit each. Dock whenever possible. The *Enterprise* shields are lost one-by-one each time the ship is hit by an enemy bomb. Once all shields are gone, the player will next lose photon units and warp drive power, in that order. The game ends when the last bit of warp drive has been drained in this fashion; therein lies your reason for docking as much as possible.

Each wave of *Tron* contains four screens, commonly known as "Light Cycles," "Grid Bugs," "Tanks" and the "MCP (Master Control Program) Cone."

While the latter sounds ominously preprogrammed to destroy Tron (the player) at a flash, it's not. The object on the "MCP Cone" screen is to shoot away the multicolored blocks (deadly to the touch, of course) as they descend in a rotating fashion toward Tron. Once a pathway has been established through which Tron can be moved (via the trigger-equipped joystick), the player should move Tron up into the Cone itself, thereby completing the "MCP Cone" screen.

To do this, shoot constantly at the colored blocks, always *firing against their rotational direction.* Whenever the direction of block rotation changes (as will happen in later stages of gameplay), reposition Tron so as to shoot once more *against rotation.* Though each destroyed block is worth points, it is not necessary to destroy *every* one. Move Tron into the Cone (worth one thousand points in itself) as soon as it is safe to do so.

The "Tank" screen can be difficult. While enemy Tanks can only be incapacitated by a *triple-shot* from the player's own Tron-Tank, it takes just *one* enemy fireball to crush the player's!

By moving your Tank aggressively (the enemies will find their way to

you) and picking off the attacking tanks rapidly through the use of bank-shots, the player can usually maintain a position close to the center-left of the screen. This is helpful, since enemy tanks cannot fire through the center partition.

Another tactic: *nose* your Tank out of a corridor, keeping the bulk of it protected by walls. This will allow for a bank-shot at an enemy to either side of you. When the enemy Tank fires, its shell will, of course, pass in a straight line through the corridor without endangering the player's Tank.

The "Grid Bugs" screen is not as hard-hitting as the "Tank" screen. These bugs, which can accumulate en masse as gameplay progresses to more advanced levels, are easy targets for players. Simply aim Tron's gun at any Grid Bug and fire. Whenever bugs tend to group together, keep your distance, but fire away. When the Grid Bugs are so grouped, quite a few points can be accumulated without much effort on the player's part (there is not a lot of switching back-and-forth in the aiming of Tron's weapon). Be on the lookout for any approaching stray bugs, however! And as soon as the warning signal goes off, make your way to safety by moving Tron into the center of the board through one of the side entrances.

The "Light Cycle" screen is another difficult one to master. The player's blue cycle must outwit the yellow enemy cycles by causing them to crash (into walls or each other), even though they are in pursuit of the player's own cycle.

Many times this can be fairly easily accomplished by "boxing yourself in." For example, push your cycle ahead full-speed toward the approaching enemies; quickly make left turns in succession until you have nearly completed a "box." At this point you should slow down your cycle in order to avoid crashing into your *own* "light wall." In a few seconds, the other cycles will self-destruct.

Although the player will usually be confronted by *more* than one enemy cycle, in early stages of the "Light Cycle" screen only one may appear. The lone enemy can be defeated by simply veering left quickly as both cycles approach each other at midscreen. Stop your own cycle before it reaches the left wall; the alien cycle will run right into it!

A final note on the "Light Cycle" screens: when boxing yourself in, always move your cycle as *close* to the wall (border) as possible — otherwise an enemy cycle may surprise you by slipping through any slight gap. It *will* take some practice; fast speeds combined with abrupt, ninety-degree turns make for a difficult ploy to master. But *Tron* is a rewarding game to play, and the practice is well worth it.

With a four-directional joystick and only a few handfuls of pepper at the player's disposal in Midway's *Burger Time,* the challenge of constructing hamburgers is not only cute-n-fun (as the attract mode would have players believe) — it's also exasperating!

The player is represented by a chef nicknamed Peter Pepper. Peter can move more quickly than any adversary (save Mr. Pickle — more on him later), which gives the player one advantage; on the other hand, the assailants, which also include Mr. Hot Dog and Mr. Egg, will ultimately either corner Peter or beseige him entirely. The player must move Peter in patterns which force the enemies to congregate *below* Peter's present position.

The defense mechanism — a "shake" button which allows the player to toss a handful of pepper at an approaching assailant — is only temporarily effective; thrown quantities of pepper (which can miss their target if the player isn't careful) only *disable* enemy foodstuffs for a few precious seconds.

The player should always begin by moving Peter to the upper portions of the screen. This not only allows for dropping the burger ingredients in an orderly fashion — it also arranges for Peter's foes to follow. Since Peter can move faster than any Hot Dog or Egg, the player can drop an ingredient while these munchies are in pursuit. Allow them to get situated under the ingredient on which Peter is temporarily standing. Then, at the appropriate time, move him across the entire ingredient (be it bun, lettuce, whatever), thereby crushing the enemy (or enemies) below.

More dangerous, but more profitable: let Peter walk partially across a burger ingredient. Time it so that just one more step will cause it to drop. Wait for the bad guys to *step onto* that same ingredient — *then* complete the move. As the ingredient falls, any enemies which fall with it not only increase the player's score dramatically ... but the burger ingredients will drop several levels instead of just one.

Using the pepper foil against the Hot Dog, Egg and Pickle is only a temporary "stop-gap" device, and shakers of pepper should be replaced (or accumulated) as each opportunity arises. Extra pepper is acquired by running over the bonus objects as they appear onscreen. Since these objects (in themselves, worth from five hundred to one thousand points) invariably appear in the *middle* of the screens, try not to stray too far. Remember that your enemies will always head in Peter Pepper's direction. Grab a bonus object as soon as it appears, then move off to safety. Whenever possible, begin dropping the hamburger ingredients from the *sides* of the screen. More time can then be spent in the middle of the playfield, and Peter won't have to run so far to squash an enemy with a bun or tomato.

One caution about Mr. Pickle: the man moves *fast!* Tumbling end-over-end, especially in later stages of the screen, he is the most difficult to lure onto or beneath any burger piece. Make sure you have a healthy supply of pepper on hand.

# SUBSCRIBE TO VIDEOGAMING AND COMPUTERGAMING ILLUSTRATED

Each issue brings you the latest industry news, shrewd game strategies, incomparable behind-the-scenes articles, insightful interviews, fiction, humor, and the most provocative reviews of the latest home games you will find anywhere.

## THE ADULT MAGAZINE OF ELECTRONIC FUN

Escape the mundane by subscribing to **Videogaming Illustrated.**

The computer age is only just beginning. Let **Videogaming Illustrated** be your guide to its wonders.

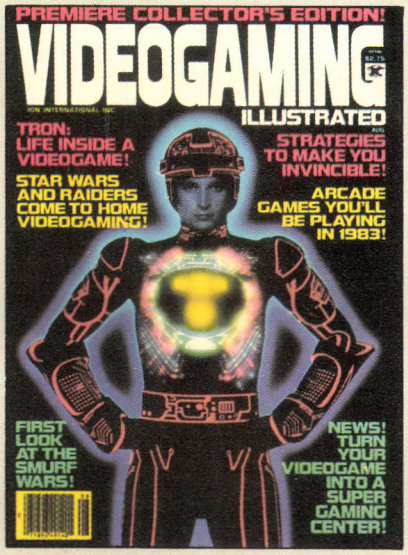
☐ Twelve issues for $28 ($32 Canada and elsewhere)
☐ Twenty four issues for $52 ($56 Canada and elsewhere)

Name _____
Address _____
City _____ State _____ Zip _____

Send coupon or facsimile to:
Videogaming Illustrated
45 West 34th Street Room 407
New York, NY 10001

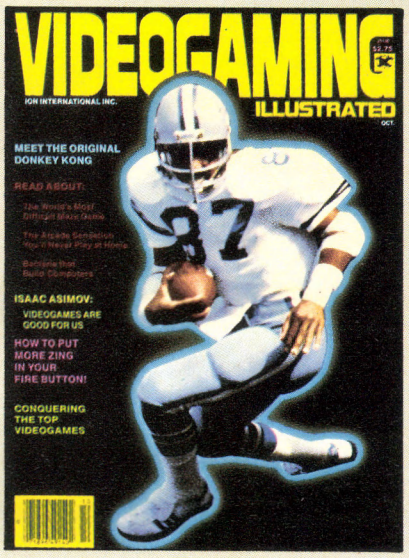
# OUR PAST, YOUR FUTURE!

## THE ADULT MAGAZINE OF ELECTRONIC ENTERTAINMENT!



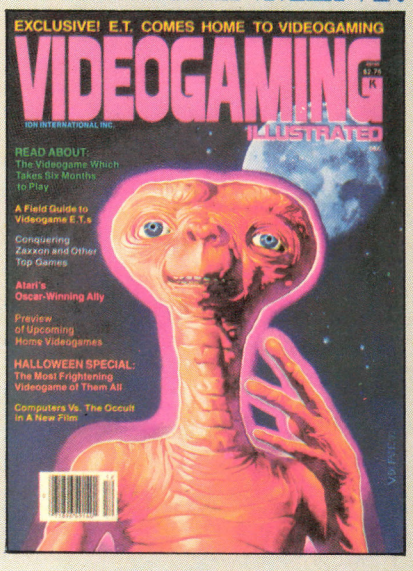

### *ISSUE #1*

- *Tron:* how the movie was made, with seven pages of breathtaking color photos.
- The big arcade flops of 1982.
- Jim Levy, the president of Activision, throws hearts and daggers at the industry.
- How to hook your videogame system to your stereo amplifier for window-rattling sound effects.



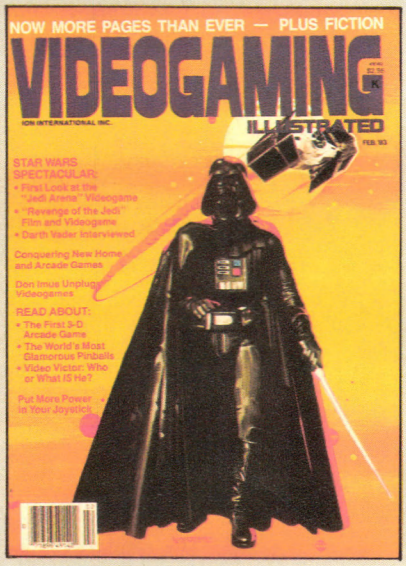

### *ISSUE #2*

- A gridiron superstar looks at football videogames, and tells why he opened an arcade.
- Science and science fiction author Isaac Asimov talks about why videogames are good for us.
- Conquering *Space Cavern, Pick Axe Pete, Space Battle, Donkey Kong,* and *Turbo.*
- How computers work.




### *ISSUE #3*

- A look at all the home videogames featuring extraterrestrials.
- What happens when computers are used to serve the occult?
- An interview with an Oscar winning actor who has an unusual relationship with Atari.
- How videogames are developed and manufactured, from concept to program.




### *ISSUE #4*

- The story of the *Star Wars* saga, on film and in videogames, including a penetrating interview with the man who plays Darth Vader.
- An interview with radio's Don Imus, the most irreverent figure in the history of the medium — and avowed hater of videogaming.
- Conquering *Cosmic Creeps, Atlantis, Kangaroo,* and *Dig-Dug.*

### *ISSUE #5*

- A profile of Stan Lee, the creator of Spider-Man.
- Conquering Tron, Spider-Man, Q*Bert, and Slither.
- A space shuttle astronaut discusses computers in space . . . and videogames on earth.
- A lawyer explains how to protect your videogame program.

**VIDEOGAMING ILLUSTRATED**

**Order your back issues of Videogaming Illustrated!**

**Please send me the following:**

_____ copies of issue #1 at $ 6.00
_____ copies of issue #2 at $12.50
_____ copies of issue #3 at $ 4.50
_____ copies of issue #4 at $ 5.00
_____ copies of issue #5 at $ 4.50
_____ copies of issue #6 at $ 4.50
_____ *copies of issue #7 at $4.50*

*Enclosed please find my cash, check or money order for $_____*

*Send coupon or facsimile to:*

**Videogaming Illustrated**
**32 Oak Ridge Road**
**Bethel, Connecticut 06801**

Name _____

Address _____

City _____

State _____

Zip Code _____

**Outside the U.S.A., please add $4.00 for every order.**

PHOTOGRAPHY BY BILL DuBAY

# You've Got The Whole Arcade In Your Hands!

***Call them "Portable," "Table-Top," "Pocket-Size," or "Hand-Held," but the mini-arcade games are opening up a whole new market.***

*by Richard Meyers*

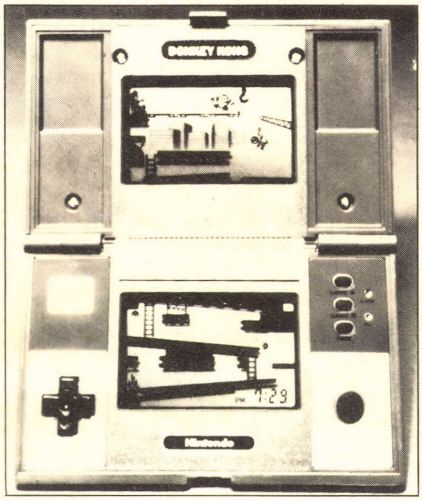
Anyone with a television has probably seen the Coleco commercial with "Mr. Arcade" magically shrinking a full size arcade cabinet to a midget machine so some seemingly demented player can stumble out of the amusement parlor with it. Well, lately, it seems as if the mystical Mr. Arcade is working overtime because stores are filling up with a burgeoning supply of "takealong" videogame entertainment.

Portable sports games are already a staple in the electronics and toy stores; from their inception, they have given the consumer much for their money. But it is only relatively recently that arcade favorites have made their way from the pinball parlors into players' pockets. Coleco, a long time toy manufacturer, came upon the scene in a big way with four "portable electronic games"—all released in the last two years.

Leading off their invasion was that giant of the industry, *Pac-Man.* In its many incarnations, the pellet masticating orb has conquered the coin-op and home console kingdoms. Sadly, as an "Arcade Game You Can Take Home With You," it falters. Although obvious care was taken in its styling, the gameplay is artificial at best and annoying at worst.

The tiny white joysticks are hard to control, the sound effects are guaranteed to have sensitive listeners grinding their teeth in sixty seconds flat, and while the inclusion of a two player—or "Head to Head"— mode is a nice idea, the machine's small size makes it difficult for any two post-adolescent players to really compete.

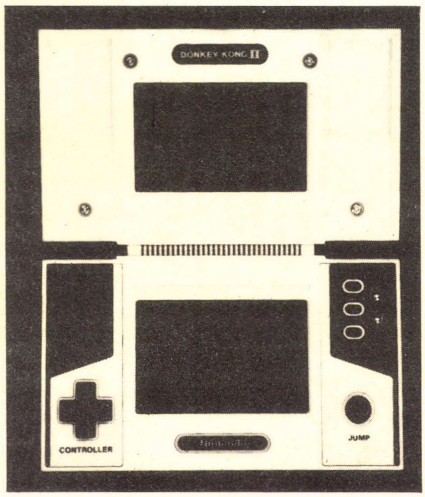
Although the Coleco *Donkey Kong* is without two player capabilities, much of *Pac-Man's* problems afflict it as well. Mario and the Ape are pale versions of their arcade selves and the game controls are especially frustrating. The mustachioed hero never seems to react fast enough and he is forever taking one step more than the player intended. Those accustomed to battering arcade joysticks with the ferocity of their play are in for some tough slogging here.




*As time goes by, the player can watch it go and play Nintendo's* **Donkey Kong**.

The comparative difference between this first duo and the pair of Coleco "Take Home" arcade games that follow is nearly miraculous. Both *Frogger* and *Galaxian* are challenging as well as entertaining miniature arcade denizens. The former toy is a one player, one game unit, but with two skill levels to choose from. The translation from the coin-op console to this tiny incarnation is clear and concise. Although the female frog who can hitch a ride with the main character for extra points is missing, a poisonous snake has been added to take up the slack. In this miniscule version, the scurrying frog has even more to worry about.

*Galaxian* has one skill level but four different games to occupy space fighters. In addition to a tiny translation of the classic *Galaxian* arcade game, there's "Midway's Attackers"—which is similar to *Space Invaders.* A second joystick and fire button is installed on the sleek, light plastic body for "Head to Head Galaxian." Although just as cramped as "Head to Head Pac-Man," the conflict is made worthwhile by less frustrating play. The sharply delineated sights and sounds of the latter Coleco adaptations make them winners.



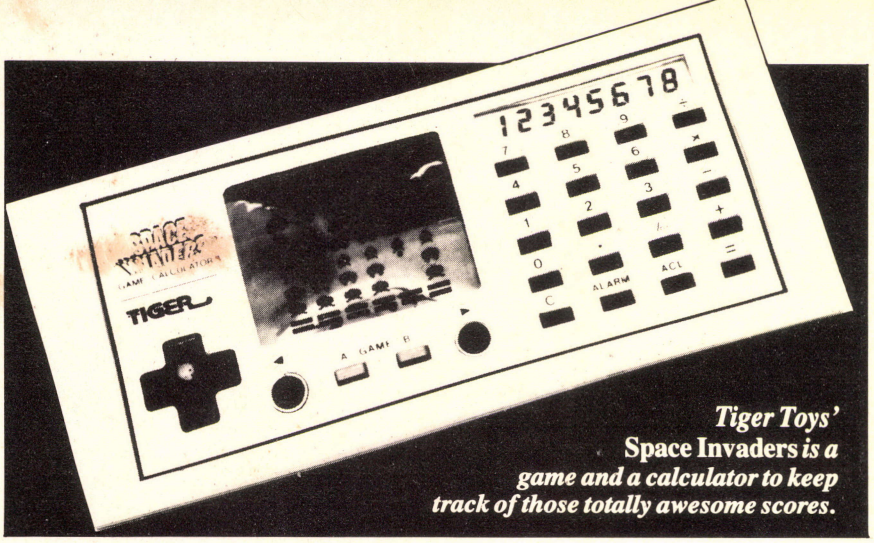

*Again, dual screen action with Nintendo's* **Donkey Kong II.**

Coleco hopes to continue their winning ways with two new "home arcaders": namely *Ms. Pac-Man* and *Zaxxon.* The lessons they learned on the initial quartet have not been lost on the company technicians. Even though all the hand-held units sold in the millions, Coleco is dedicated to constant improvement. *Ms. Pac-Man* has eight screens of increasingly difficulty, and *Zaxxon* has a special process to recreate the arcade version's unique 3-D like, askew point-of-view gameplay.

The lessons Coleco learned have not been lost on the other toy manufacturers either. Entex Industries fueled profit-making inspirations with their "Table Top Arcade Games." Like their Coleco brethren, these machines are powered by four "C" batteries and come complete with joysticks. While many of your fingers remain inactive during play on the simpler home arcaders, the table tops give all ten digits a run for your money. Entex's *Defender* and *Stargate* each have a Thrust, Fire, Smart Bomb, and Reverse button as well as a squat silver stick. Each also comes with two skill levels, a fluorescent display screen that incorporates the famous radar screen, and a sound button that can muffle or completely eradicate the noise effects—probably much to the joy of parents and game-haters everywhere.

Entex doesn't leave the table tops at that. They also have their version of *Super Cobra,* in which the player can not only pilot a video helicopter, drop bombs, and shoot missiles, but control the speed of the craft and gameplay as well. Entex's equipment is heady stuff, because they have chosen to translate very complicated arcade machines down to carry-along size.

Not everyone is leaping into the fray with both feet, however. Mat-




***Tiger Toys'* Space Invaders *is a game and a calculator to keep track of those totally awesome scores.***

tel Electronics is testing the waters with their corporate big toe first. "The key to our success," maintains Charlene Margaritis, the manager of public relations, "is that we study carefully." Indeed, their only arcade translation is *BurgerTime,* the popular Midway machine licensed from Data East.

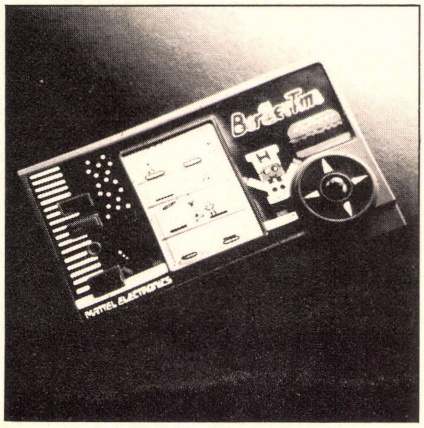
Mattel stresses that the reason *BurgerTime* is their sole arcade-oriented hand-held game is that they were intent on licensing a product that would deliver full size excitement in a tiny package. "We want to capitalize on the right title," Margaritis concludes. For them, *BurgerTime* is definitely the one. Why else would they be releasing the game in six—count 'em— six versions. In addition to the hand held, there's a Mattel Intellivision *BurgerTime,* an M Network version, an Aquarius variation, and two computer discs: one for the Apple and one for the IBM home unit.

Nintendo of America Inc. doesn't have to put all its eggs into one *BurgerTime* basket. They don't even have to license other companies' games. They don't have to because they are the Japan-based company which introduced *Donkey Kong* to the frenzied videogame world. The Japanese have always been great special effects animators, so when it came to translating the cartoon foolery of the *Donkey Kong* family, they were more than up to the challenge. Beyond that, the charm of their visuals is matched by the compactness of the games.

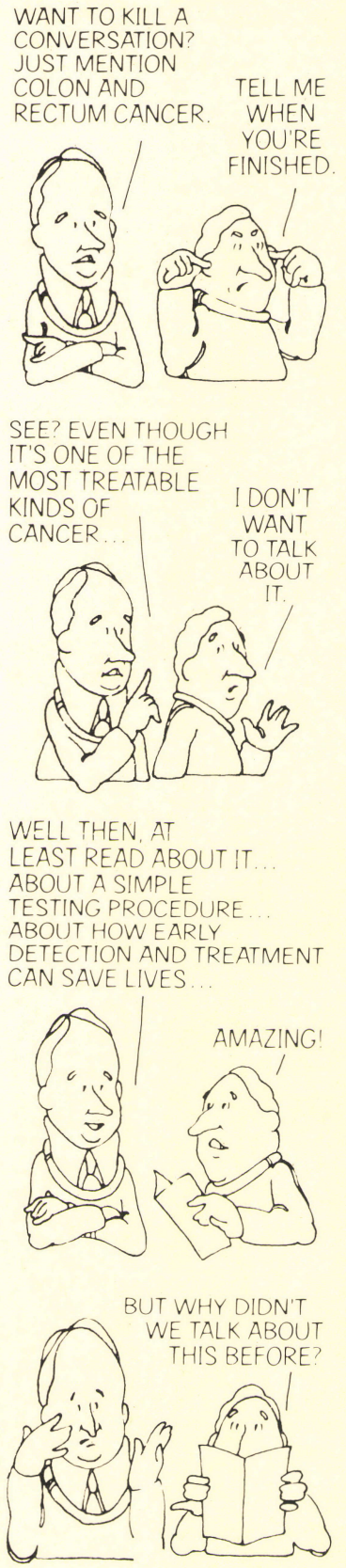
" 'Game & Watch' is the world's first pocketsize electronic game," proudly declares director of marketing Bruce Lowry. "They duplicate much of the action and visual imagery of the arcade games. Even more remarkable is the fact that they have been designed to be easily viewed from any angle, indoors and out."

Lowry has a leg up on the competition. Most portables are best played in the dark, since they utilize fluorescent light, but Nintendo's *Donkey Kong, Donkey Kong Jr.,* and *Mario Brothers* all utilize an LCD, or liquid crystal display screen, as it is more commonly called. And just to make the package complete, the games double as an alarm clock, keeping time with an accuracy rivaling your favorite Timex.

Now, concerned players can not only while the day away with challenging, interactive, portable toys, but they can see how much time they spend on them as well. With companies like these working on smaller and better arcade-based games, it may not be too long before you're playing your favorite Atari, Coleco, Intellivision, Vectrex, computer or arcade game on the inside of your sunglasses.




***Mattel's hand-held* BurgerTime *is but one of six burgerversions.***


LET'S TALK. For a free booklet on colon & rectum cancer contact your local ACS office.

**American Cancer Society**

This space contributed as a public service.

# COLECO'S ADAM

It was a vision of things to come: at the Consumer Electronics Show in Chicago in June, the Texas Instruments booth, elaborate and empty, was so quiet you could hear the sales reps' teeth grinding. Meanwhile, practically next door, crowds could barely be accommodated at the Coleco booth where that company's new home computer, Adam, was being demonstrated.

Two weeks later, Texas Instruments' stock tumbled 41½ points in one week; this was not so much a reflection of the quality of that company's product but a result of the cut-throat atmosphere of the home computer market, an atmosphere created in part by T.I.

Texas Instruments and Commodore, two companies that helped torpedo the pocket calculator market, have been engaged in a price war. The TI99/4A, which originally sold for $1150, can now be found for around $100 in many regions. The list price for the Timex Sinclair 1000 has tumbled to around fifty dollars. This product-glut, sales-slowdown atmosphere prompted this remark from William G. Kelley, president of the American Home Video Corporation: "When they went to $99, people started asking 'What's wrong with it?'"

Indeed, as the home computer companies learn their lessons, consumers are learning a few of their own: at any price, a home computer should be a one-time purchase; many, not all, but many low-cost computers are toys, useful mostly for learning how to use a computer; and, most importantly, the attractive low price for many computers is but the tip of the iceberg—to be useful, further investments in a disk drive, printer and software must be made.

'Bundling' may be the answer, or so many manufacturers hope. Taking the consumer by the hand—and hoping to earn greater initial profits—some home computer companies will be releasing their hardware in packages at a higher price but with crucial peripherals included. The first, if all goes according to plan, will be Coleco with their Adam.

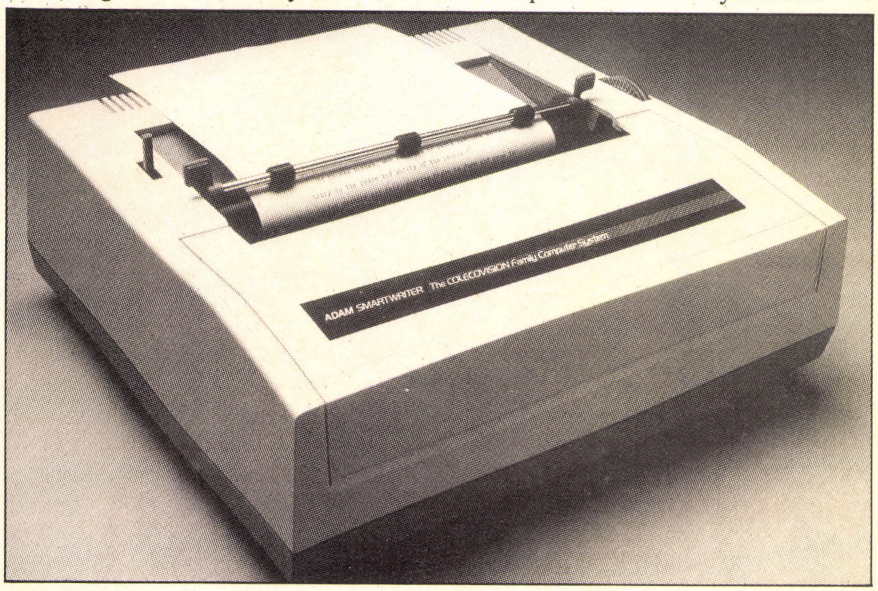
Adam is a computer system which includes a stepped keyboard, letter-quality printer, mass memory drive for its 80K of RAM memory, a word processor built in in ROM, two game controllers, a BASIC program, and a *Buck Rogers: Planet of Zoom* (super) game program. The system will sell for around six hundred dollars.

For around five hundred dollars, Adam is available as a module to existing ColecoVision units, plugging into the expansion module interface.

Adam's keyboard contains seventy five color-coded keys in all, including six SmartKeys which facilitate the use of the word processor (they can be redefined for various other functions), eight command keys, five cursor keys, and a full 'qwerty' keyboard. To the right of the keyboard are the controllers, which can be locked in place or handheld. The numeric keys on the controller allow the user to enter numbers calculator-fashion, and the 'joystick' controller can be used for fluid cursor movement.

*Coleco's game controller facilitates the use of the screen's cursor.*

The SmartWriter, the friction-feed daisy wheel Coleco printer, slaps down the data at a not-bad 120 words per minute on any kind of paper, including fanfold, up to nine and a half inches wide. It takes standard interchangeable ribbon cartridges. A pica ten daisy wheel is included with the package, but other type faces are available.




*At 120 WPM, the Adam printer is not the fastest. Those who are impatient to own a word processor will have to be patient afterwards.*

Adam's memory console contains an expansion slot that allows the option of increasing the memory capability to a whopping 144K. There is also a second expansion port that accepts all Coleco expansion modules and special controllers, a game cartridge slot for ColecoVision games, and the digital datapack drive system.

Adam's software comes in the form of digital datapacks. "Digital datapacks are a new storage system," says Coleco's president Arnold Greenberg. "They are not audio cassettes, but digital cassettes which transfer data at vastly greater speeds than is the case with audio cassettes. The transfer speed is substantially comparable to floppy disks and the cost is considerably less." Each datapack can store up to 500K of information, three times the memory of many floppy disks, the equivalent of 250 pages of double spaced type.

Coleco's software system is fully integrated: information can be transferred from one program to another. Many programs written in Applesoft BASIC will run on Adam. Additionally, CP/M software will be available on digital datapacks.

ColecoVision owners, mindful of the initially sluggish release of games for that system, will wonder when software will be available for the Adam.

Arnold Greenberg promises that "a good deal will be available essentially simultaneously with the release of Adam and others will come later this and the early part of next year. There will be a continuous introduction of software over the next six months."

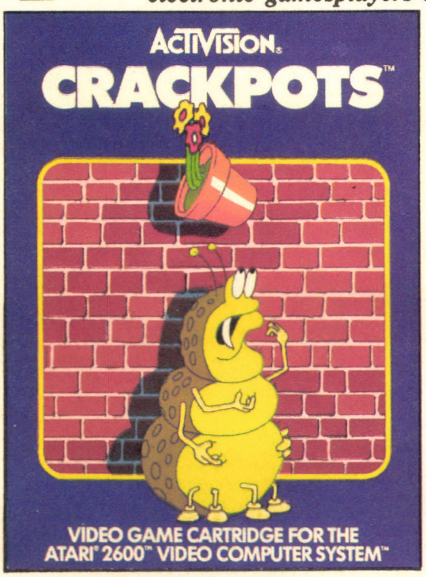
Promised programs include a BASIC self-teaching program, a LOGO program, educationals (two *Smurfs* and three *Dr. Seuss* young learner programs), *ColorForms* (a graphics program), a quizzing program, and *SmartFiler* (a data base management system). The first games that will be adapted to the digital datapack format will include *Time Pilot, Zaxxon, Smurf Rescue, Donkey Kong Jr., Turbo, Subroc 3D,*

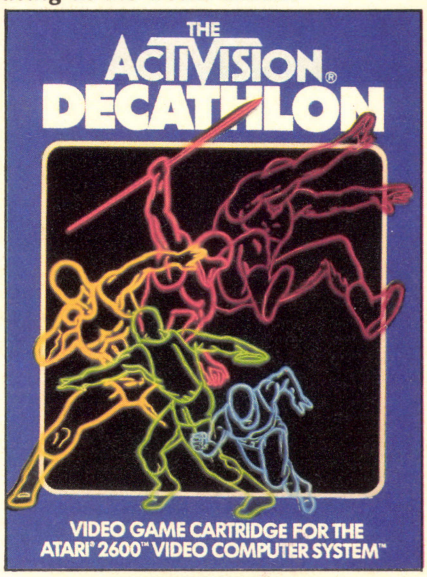
Continued on page 75

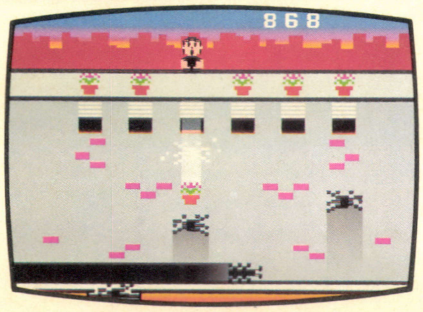
# chip ahoy

## *A Preview of Upcoming Games*

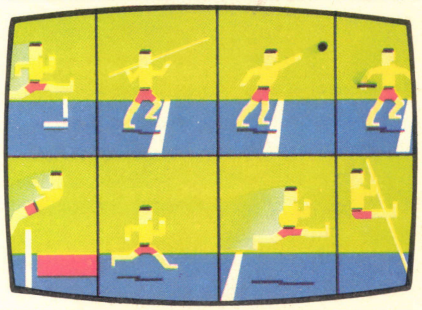
*To complement our extensive coverage of new videogames, arcade games, and computergames in their respective* Eye On *sections, we are introducing this new department. Each month,* Chip Ahoy *will provide electronic gamesplayers a glimpse of the challenges they will be facing in the weeks ahead.*



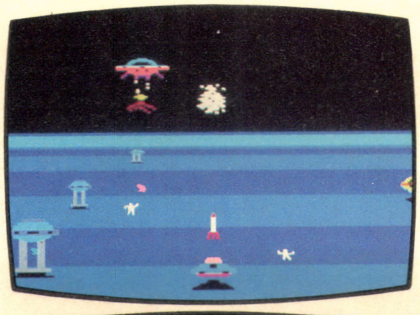


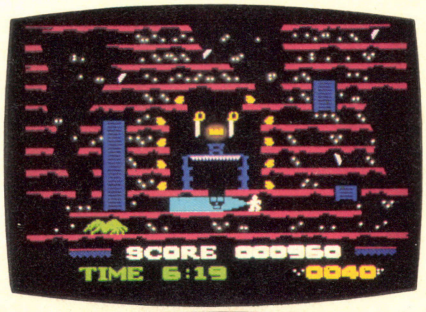



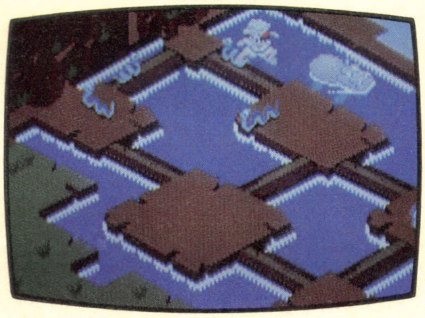

**Crackpots** *is a* **Kaboom**-*style game featuring upwardly mobile bugs.*

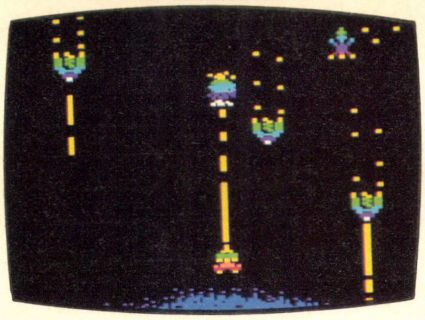


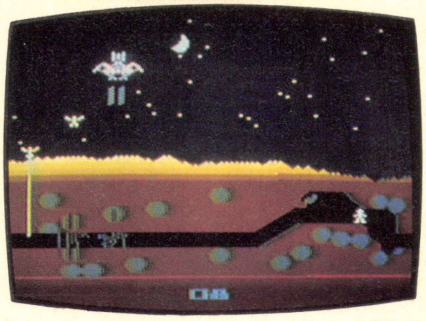
*Be an armchair Olympian with Activision's multi-challenging game.*









*Rescue and warfare with Imagic's* **Moonsweeper** *(top) and* **Solar Storm** *(above) for the Atari 2600.*

*New from Sega for the arcades is the lustrous* **Congo Bongo**. *The player controls a hunter in hot pursuit of the mischievous gorilla Bongo in this cartoon adventure epic.*

*For the Atari computers from CBS Electronics is* **Mountain King** *(top) and* **Boulders and Bombs** *(above).*

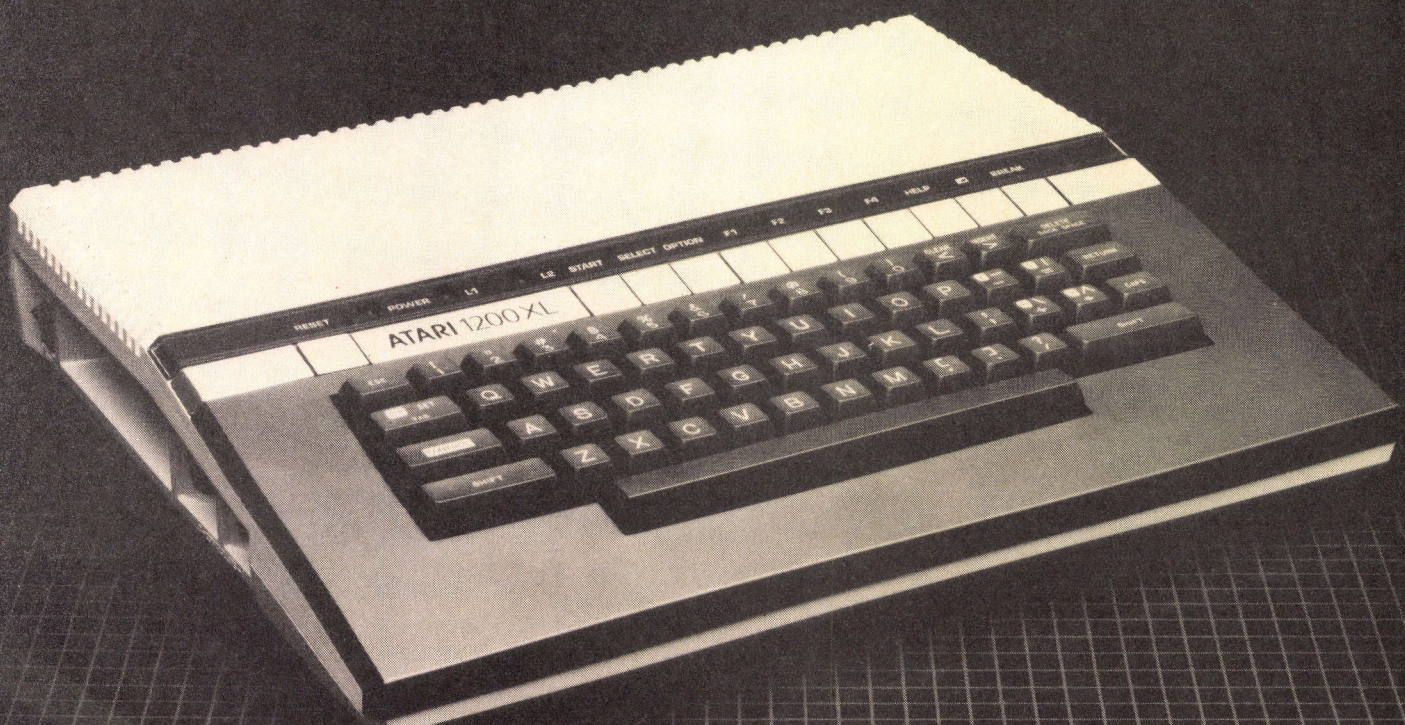
# ATARI'S 1200XL

***Unto the third generation shall be born a sleeker, friendlier, more versatile and expandable computer.***

***by Martin Levitan***

**Atari's 1200XL, faintly reminiscent of the Texas Instruments machine in styling, epitomizes the look for this year's newly released home computers. Though not much more powerful than its antecedents, the 400 and 800, the 1200 does show that Atari has been listening to its public. In the words of Raymond Kassar, *Atari's* chairman and chief executive, ". . .the model 1200XL is a new generation in home computing, a culmination of our experience in hardware design. With its user aids and beautiful packaging, the model 1200XL is one of the 'friendliest' computers ever built—and at an affordable price."**

**Twice before, Atari set out to make the ultimate user friendly home computer. But that was before anyone could really say what "user friendly" meant.**



The Atari 400 was designed to be friendly to the peanut butter and coke set. It was successful in keeping the innards safe but the membrane keyboard and limited memory has kept it from becoming a truly general purpose home computer.

The improved keyboard, added memory and avant garde styling of the 800 answered many of the problems of the 400, abandoning no more than the drip-proof housing. It, too, had a clumsy side housing that, combined with the tangle of cable sprouting from everywhere, gave the unit a chic messiness that would definitely keep it out of the home office or kitchen.

The physical differences between the 800 and the new XL are striking. Beginning with its redesigned case, you will note that it has a creme and dark brown plastic case with high tech false air vents. The function keys have been neatly assembled into a smooth brushed metal control strip just above the typewriter keyboard. These eleven metal push buttons include the *System Reset* key which has been moved away from the other function keys to the left of the Atari nameplate. This location is supposed to prevent program entry errors that have been known to wipe out an evening's work with a single mis-stroke. I would prefer it to be further from the ESC key. (Apple solved this problem by making System Reset a multiple key function, requiring coordination and forethought.) To the right of the name plate are the Start, Select, and Option keys that were on the right side of the 800 keyboard. Following these are the four new Function (F1,F2,F3,F4) keys, the Help button, inverse video key, and the Break key.

The four function keys have been allocated specific uses. You can leave them as they are or reprogram them to perform other tasks in your programs. This reprogramming feature also applies to all the rest of the keys with the exception of the Break, Shift, Control, System Reset and to a limited extent Help, Start, Option, and Select. You can, for instance, change the keys from the typewriter standard called QWERTY (for the "word" spelled out by the top left row of keys) to an alphabetic arrangement which may be much easier for a small child to master. If you're fond of esoterica, you can rearrange them into a DVORAK keypad, which is now said to be the most efficient key placement design. There is even a European character set.

The standard meanings of the special function keys are designed to reduce the number of keystrokes it takes to accomplish day to day tasks on the computer. They will move the cursor up (F1), down (F2), left (F3) and right (F4). If used with the Shift key, they will bring the screen cursor to the top left position without clearing the screen, the bottom left, the far left of the current line, and the far right. When used with the Control key, you can lock up the keyboard so no playful tyke can mess up work in progress while you are refueling in the kitchen. You can also shut off the screen while the computer is still working. This is a feature to be used when you know the computer is going to be chugging away at a math problem or sorting through a long list.

***With the recent release of four new computers from Atari, a canny consumer may find the 1200XL at a low price.***

If there are no significant intermediate results needed on the screen while it's doing this busy work, shutting off the screen will speed up the processing by as much as thirty-five percent. The other Function keys, in combination with the Control key, control the keyboard "click" and select the European character set.

The Help key is one of the new features which will work with selected new programs. The object is to provide a means of accessing program information when you get stuck and don't know what to do next. You can also use it in your own programs to help guide another user.

The Help Key has primarily designed as a self-test button. All the latest computers have them; it can save a lot of phone calls and trips to the dealer for false alarms. Generally, if the self-test doesn't turn up the problem then you must look to the software. The self test mode is activated when there is no cartridge in the slot and the Help button is depressed. A program in the computer leads you through a series of tests for ROM errors, faulty memory locations, the sound channels, and all the keys of the keyboard.

Atari provides a variety of features that make the basic machine as exciting and powerful a computer as one needs for the home. The Atari graphics and sound features are still the finest available in a home computer. A spectrum of 256 colors is available for display on the monitor as well as the four distinct sound "voices" that cover 3½ octaves.

## *MEMORY*

All computers announced in the last twelve months are called "64 K byte machines." In contrast, the Atari 800 was described as a 48 K byte machine. The number of kilobytes of main memory in a home computer has become a selling point akin to the engine displacement of an automobile or the cubic feet of storage in a refrigerator. Just as in the refrigerator, there is storage area and there is storage area. Some useful and the rest . . . a selling point.

While it's not a simple matter of counting bytes, Atari has always given an honest count. They have made very efficient use of the main memory space in both their machines. Rather than waste space, they supplemented the main memory with additional Read Only Memory in the form of cartridges to store the essential operating programs. Since these operating programs don't change, there was no need to load them into the more volatile and easily changed main memory. The central processor could always reach directly into the ROM cartridge when it needed some of its information. This contrasts to the way most other personal computers work. They often require you to put everything into the main memory, taking the limited available space with housekeeping tasks. The maximum memory that the brain of an eight bit microcomputer (the kind we use in our home machines) can use is 64 Kilobytes. There are some tricks that can be used to get around this limit but it is not important to this discussion.

If the Atari 800 is described as a 48K machine, because of its main

memory, and the 1200XL is a 64K machine, one would expect to be able to cram an additional 16K of program into the 1200XL. Alas, the truth is that you cannot set any more lines of BASIC program into your 1200XL. Here's why.

In the older 800 the available memory is 48K. Add to that 10K of ROM for the BASIC Language Operating System. This ROM is directly used by the central processor, for a total of 58K. The new machine has a 16K operating system. It can't be on line with all 64K RAM because the central processor has not changed. It still can't use any more than a total of 64K of memory. That means at best that 64 minus 16, or 48K, is available for program use (Don't write letters, I'm rounding off to make my point.). Of course, the 16K ROM can be completely bypassed, but then you don't have an operating system, except for machine language. And if your interest is in machine language you probably aren't interested in a beginner's computer like the ones Atari produces.

This does not mean the Atari 1200XL is less of a machine than they say it is. It just means that another distinction between home computers is blurred for the consumer. Feature for feature, the Atari 1200XL is a better machine than many. It is probably the first computer specifically designed for the home as an attractive item of furniture in any decor.

A number of features have ben designed in response to Atari's experience on the 800 and 400. With the 1200XL, Atari has discontinued installing the standard internal speaker. Since the 1200XL is already set up to control the external TV speaker as in the 800 before it, this feature was considered redundant.

There are no longer two cartridge slots; the second one on the 800 was rarely used. The power switch, cartridge slot, and two controller ports are grouped neatly on the left side. Users often complained that the joystick and paddle wires were always in the way. Two of the joystick controller ports have been eliminated. Apparently they weren't used much either.

As we pointed out before, Atari machines are the machines of choice for game players and gamemakers. In this model Atari has made additional graphics modes (that weren't easily accessible from BASIC) accessible. Composing on a personal computer using a word processing program, one of the minor irritations is the way the screen scrolls the lines as you move about in the text perfecting pearls and punctuation. The screen moves in clumsy increments jumping around in large text line portions. Late into the night as the deadline nears and the coffee accumulates, this can be a jarring experience.

Well, Atari has seen to that; its fancy graphics capability permits an added plum: smooth scrolling.

*No Videogames! What kind of place is this?*

## *SOFTWARE*

What ultimately makes or breaks a home computer system is the software. The software that the manufacturer provides is important, but just as important is the software that a particular machine inspires private individuals and companies to create for it.

User friendliness, compatibility with existing machines, availability and variety of software will ultimately sell the Atari 1200XL to the public. Atari offers quite a choice: Atari company software, Atari Program Exchange (APX), and independent software.

Atari has introduced a number of new products to coincide with the 1200XL release. These products are compatible with the 800 and 400, as well as the 1200XL. In the entertainment area, E.T. and Elliott have been drafted to lead the group with a puzzle solving game using the high-resolution graphics capabilities of the machines. *Dig Dug* is a version of the arcade game. It allows advanced players to skip to higher levels of difficulty. *Galaxian,* another arcade game, is a slide-and-shoot shoot-em up. *Defender,* a very popular game, asks the player to defend Earth and rescue its population from attacking aliens. The operator controls a spaceship that fires missiles and avoids alien crafts. It is played using horizontal scrolling and whiz-bang graphics. *QIX* is a different type of arcade game, requiring the player to surround the swirling QIX helix with color and abstract designs.

The new educational offerings begin with a series of Early Learning products designed to teach pre-reading skills to children of three to six years. Using colors and sound, Atari strong points, *Juggle's Rainbow* teaches children the concepts of above, below, right and left. Line and circle games help children learn the letters b,d,p and q, which are some of the most difficult in the alphabet. *Juggle's House* uses the same techniques to teach additional skills.

The new selections in the Home Management category include an easy-to-use personal finance product on two diskettes designed to help families keep detailed records of family income and expenses as well as establish a budget. *Timewise* is an appointment calendar program. It

*Continued on page 56*

# NEW PERIPHERALS

Atari is introducing five new peripherals designed to extend the usefulness of the 1200XL; they are also compatible with the 400 and 800 models. The built-in interfacing makes it possible to directly attach peripherals to the XL. The serial interface easily expands the system to include disk drives, printers, modems, etc. New on the horizon are the 1010 Program Recorder, the 1025 80-column printer, the 1020 40-column printer/plotter, the 1027 printer and the 1050 disk drive.

The 1010 Program Recorder, a cassette memory system, allows users to store and load their own programs and data as well as Atari cassette software. The 1010 uses standard audio cassettes. Two channels are featured in the Program Recorder. One channel is for computer programs or data, the other is for voice or game sound effects.

The 1025 80-column printer is designed for rapid text preparation, on 8½ inch paper. Dot-matrix characters are printed at the rate of forty characters per second. Designed for easy usage, the printer's controls are located atop and at the front.

The 1020 40-column color printer/plotter offers four-color text and graphics on 4½ inch paper. You can prepare charts and graphs to any set of X and Y coordinates. You can even change the size and type face of the text to be printed. Choose from sixteen different colors for the four print pens. Just snap the pens into the 1020's rotary print head and watch quality work printed.

The 1027 80-column printer prints letter-quality characters in 6.7 inch line lengths at a rate of twenty characters per second. Print style is twelve point Prestige Elite. Other features include bi-directional printing, underline capability, changeable ink cartridge, and manual paper/tension adjust knobs. Cut sheet or continous rolls can be accomodated.

The 1050 Disk Drive uses standard 5¼ inch floppy diskettes. It will be initially released with the Atari Disk Operating System II (DOS II) which provides an 88K formatted memory capability. Later, DOS III, providing 127K memory in dual density format, will be available. DOS II can be converted to DOS III at low cost, with single density data converted to dual density.

***—Susan Levitan***

***With seven computers in release and a fleet of peripherals, including printers, light pens, cassette and disk memory storage systems on the way, Atari is the most hyperactive competitor in the business today.***

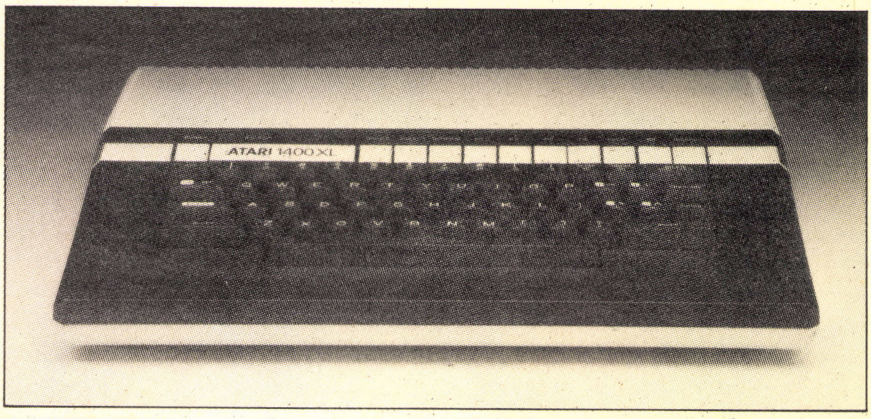
will help keep track of appointments, holidays and other important dates. When used with the printer, it will give you a schedule and calendar. *Atari Writer* is a new word processing program for the 400, 800 and 1200XL computers. It incorporates an easy to use plug-in cartridge and uses either cassette or diskette to save files. With this product, a document can be created quickly and printed in a perfectly formatted final copy.

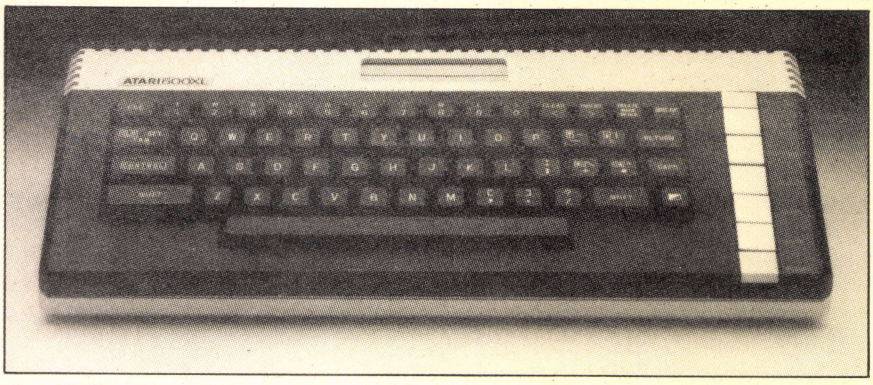
*Atari Music* is the first in a Music Learning Software series. It is designed to teach (third grade to adult) fundamentals of music theory, including note reading, steps, major scales and major keys. The program's four lessons use tutorials, exploratory modes, drills and tests. Three of the lessons are reinforced through the use of built-in video games. Notes are sounded by using the joystick controller.

One step beyond the professionally developed software from Atari is the category called "very good" and "super" amateur software. Atari's farm team is made up of all the users who have always believed that they could write programs as useful as those found on the store shelves. Atari cultivates this resource by sponsoring the Atari Program Exchange, APX. APX was created to distribute user-written software for the Atari home computers. Here you will find a wide variety of software appealing to users of all ages with different needs and interests. The APX software catalog is published quarterly, listing products that are currently available. Categories range from personal finance & record-keeping, business and professional applications to system software, personal interests and development, education and entertainment.

APX includes utilities such as the modestly named Ulltimate Renumber Utility; useful software that edits, cross-references, compresses, emulates, disassembles, demonstrates, dumps and even sorts. Personal finance and record keeping offerings are as specific as the *Bowler's Database, Newspaper Route Management Program,* and *Recipe Search 'n Save.*

Under the APX program Atari runs contests, provides hard to find hardware for the hobbyist and publishes newsletters. The catalog reviews each software entry. It comments specifically on the user friendliness of the program, the quality of the manual, the minimum equipment required to use the program, ordering information, a lengthy discussion of the objective of the particular piece of software, and, if there is room, a menu from the program. A sample screen is shown to give a feeling for the graphic quality of the piece. There is often more information available on the APX software than on professionally written software costing much more.




***Atari's four new computers are capability-stepped, the simplest and least expensive being the 600XL.***

The education category typifies the independents' thrusts. You will notice that the traditional drill and practice software is being replaced by more challenging programs. Chris Bowman, national manager of educational marketing for Atari, says that, "we've begun to see the computer as a powerful tool for developing problem-solving and critical thinking abilities."

At least two companies have striking examples of such software for the Atari. One, Learning Company, produces a series of logic games. Another, Sunburst Communications, is developing a logic series of its own and an early learning series. *Experiments in Problem Solving* from Sunburst includes a manufacturing simulation exercises that presents a two dimensional view of a device. From this head-on view of the part to be made, the player proceeds to an assembly line shown in profile with drills, jigsaws and rotating tables. The student has to figure out the proper sequence to produce a part identical to the schematic on the screen.

Spinnaker Software, from Cambridge, Massachusetts, has an innovative series for youngsters. In *Snooper Troops,* detective games help children learn to take notes, draw maps, classify and organize information and help develop vocabulary and reasoning (Ages ten to Adult). *Rhymes and Riddles* is for the younger group (Ages five to nine).

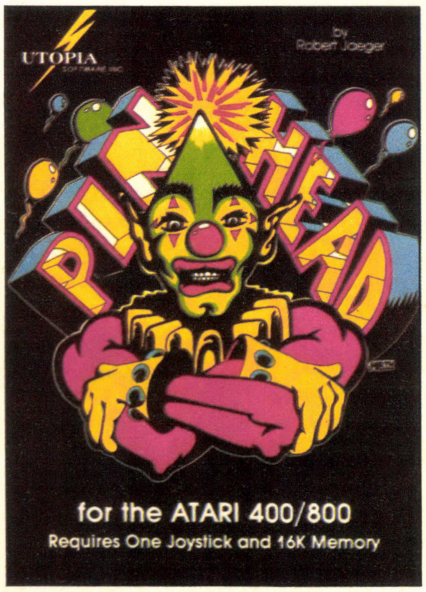
Atari will be releasing four new remarkable computers in the near future: the 600XL, the 800XL, the 1400XL, and the 1450XLD. With this influx of software-compatible units into the market, a canny shoper may be able to purchase a 1200XL at a significantly reduced price.

Pounding intergalactic warships into space dust can be fun, but the Atari computers will be useful even after the battle is won . . . and it comes time to get down to business.

### *Pinhead*
***Utopia Software***
***Atari 400/800***

*Pinhead* has much in common with the arcade flop *Kick Man.* There's a figure on a unicycle, which the player skids back and forth under racks of balloons. Depending upon the level of play, the computergamer tries to pop the balloons with his/her pointed head, or catch them in a stack. Missing a balloon with the sharp hat, the beleaguered rider has a chance to boot it aloft with the jerk of a toe. Miss and the balloon strikes the ground, unseating the rider.

The *Kick Man* screen was taller than it was wide, which allowed the player to cycle at a relatively leisurely pace. The *Pinhead* screen is tight. Because the screen is longer than it is tall, there's no way to reach a falling balloon on one side if you're flush on another—meaning that you have to play the middle, and will con-




stantly be on the move.

Nuances of play differ from *Kick Man* —for instance, at one point instead of falling bombs there's a bucket which you're not supposed to kick; get it?—but, on the whole, fans of one will enjoy the other.

The graphics in this Robert Jaeger game from Utopia are superb. The animation of the Pinhead is very good, but it's the balloons which shine (literally): they look real enough to pluck from the screen. Jaeger has captured their ethereal movement and glistening surface, exhibiting consummate mastery of the medium.

He has also provided the game with excellent carnival-like ditties for each level—wherein lies our only real gripe. Robert: *Around the World in Eighty Days* is a copyrighted song. While there's no disputing that it suits the game perfectly, somewhere on the package the composer *should* have been credited!

Otherwise, this is a unique, super-exciting game for all ages. If you've been looking for a great non-violent action program, this is it.

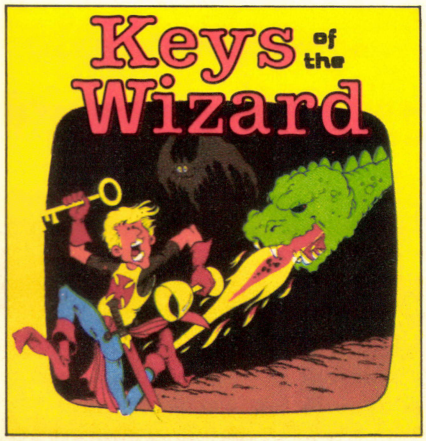
This Atari 400/800 game is the first property to be released by Utopia Software (58 Millay Rd., Morganville, NJ 07751). ***-Jeff Rovin***

### *Keys Of The Wizard*
***Spectral Associates***
***TRS-80 Color Computer***

One of, if not *the* most entertaining adventure games available for the TRS-80 Color computer comes from Tacoma, Washington's Spectral Associates. *Keys of the Wizard* is a fast-paced adventure filled with traps, tricks, treasures and a menagerie of man-eating monstrosities.

There are three skill levels, the easiest requiring a mere ten hours of gameplay to resolve. The game is played in real time, which means, simply, that when a beastie catches your scent, you won't have a snowball's prayer.

The object of the game is simplicity itself. The player must find thirty-two treasures and deposit them in the wizard's sanctuary. In your standard adventure game, this would be an almost impossible task, given the myriad of goblins, dragons, ghosts, ghouls and groaties infesting the common computerchip. In *Keys of the Wizard,* the task is made even more complex because the objects



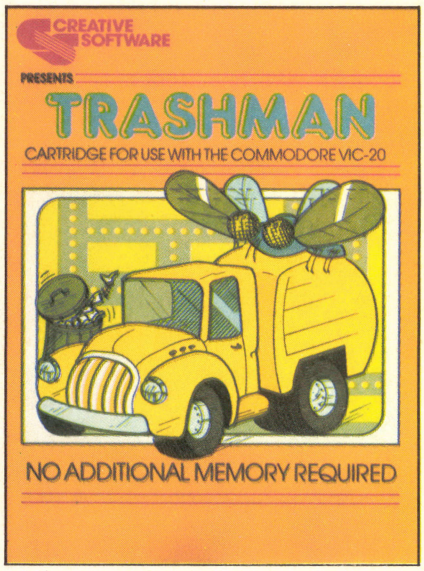

are shuffled about with each new game. This, coupled with more than 180 different rooms, traps, corridors, caverns, hills and hidden mazes on a playing field spanning three very different, dangerous and complex tiers of play, makes it virtually impossible to find any one of the thirty-two treasures without being slain by an orc, devoured by a dragon or stomped by an overzealous cyclops.

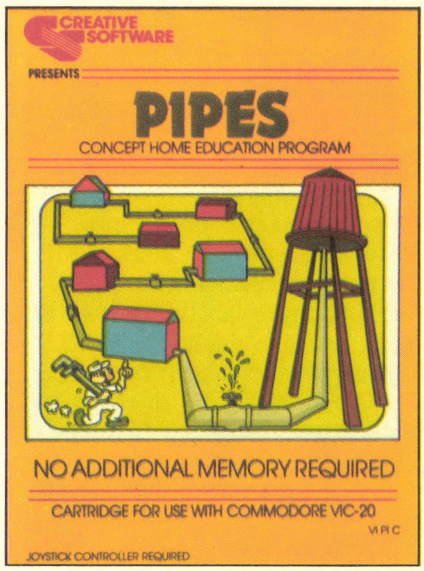
Common sense dictates that a map be created for a game of such magnitude. There are so many hidden rooms, endless mazes, collapsing floors and runaway magic spells that a player can suddenly and very easily find him or herself on another tier of the playing field without even realizing it.

There are no graphics in *Keys of the Wizard.* Those new to adventure games may be disappointed by the endless paragraphs describing the current setting or situations. That, however, is very much a part of the game's charm. Like a good book, it leaves a lot to the reader/player's imagination. Unlike a good book, it offers alternative solutions to virtually every plot twist. It also allows players to dictate the outcome, guiding themselves through the seemingly endless maze of settings, collecting the treasures while avoiding death by slaying or fleeing from the mythical antagonists.

There's no right or wrong way to play *Keys of the Wizard.* There are as many ways to win the game as there are to find yourself suddenly touring the inner workings of a bat, troll, dragon or cyclops. Great fun for novice or experienced adventurers.

***—Bill DuBay***




**Spills & Fills** *is a companion game to* **Pipes** *in the home education series from Creative Software.*

### *Serpentine*
### *Creative Software*
### *Commodore Vic-20*

Here's another game licensed from Broderbund Software; it is a winner from either company. The player controls a small blue snake which slithers through an unobstructed maze while more and more blue serpents crawl toward it. The game has two objects: survive long enough to lay eggs and swallow the red snakes little by little. It *has* to be little by little because the blue serpents are bigger than your snake and only after you eat away at them from the rear do they turn green and become small enough to conquer.

"Big serpents swallow little serpents," warn the directions, and this is advice well heeded. The blue snake can nip at the others only from behind until they turn green. Then they can be totally destroyed by a head-on collision. Meanwhile the red serpents can launch a frontal attack anytime they feel like it.

Adding spice to this mix are the disappearing frogs which pop up all over the place. If they are eaten, it adds one more link to your serpent's length. Laying an egg, however, diminishes the length by one segment. If the player survives, the maze can be fairly littered with eggs and frogs' legs, and the score will grow and grow—fueled by swallowed eggs, snake lengths and heads.

### *Trashman*
### *Creative Software*
### *Commodore Vic-20*

A *Pac-Man* by any other name would not smell as sweet. Pure and simple, *Trashman* is Creative Software's version of that ground breaking arcade game introduced in America by Midway Manufacturing. One supposes that each company must endeavor to satisfy the *Pac-Man* lover, but it is still annoying to witness their transparent efforts. The only originality in games like *Trashman* lies in how the yellow orb, ghosts, and pellets are renamed.

In this case, the muncher becomes a dump truck, the pursuers become "giant flies," the pills becomes refuse, and the power pellets become garbage cans. The truck driver must clean the "streets" while avoiding the killer insects until (s)he can empty a litter barrel. Then, for a couple of seconds, (s)he can grind the pesky flies under his/her wheels. But you probably already figured that out, didn't you?

To enliven the familiar proceedings, Creative Software has programmed in a game speed control. The player chooses the truck's and flies' speed before the game starts.

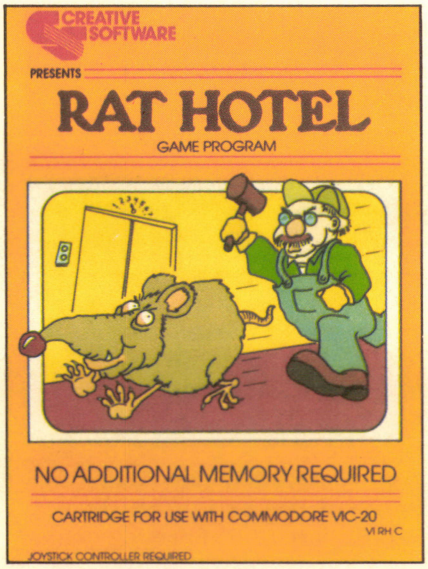
If you are unable to get *Pac-Man* by any other means, *Trashman* will suffice. Otherwise, stick with the original.

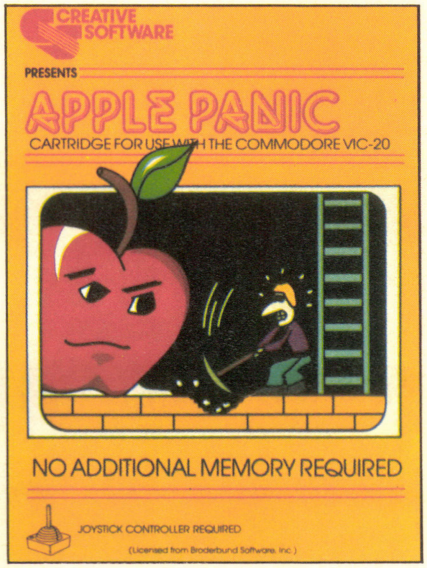
### *Pipes*
### *Creative Software*
### *Commodore Vic-20*

This is sub-titled a "Concept Home Education Program." Although engaging and entertaining, I fail to see of what use *Pipes* will be to anyone but a future plumber. Logic and some math *is* required, however, to connect houses to the town's water supply. On the right is a pipe factory where the plumber buys straight, curved, or valved pipe to link the water tank with the home spigots. The object is to use as few pipes and spend as little money as possible.

These simple rules aside, *Pipes* is unusual and delightful. The graphics are strong and, while the gameplay might not be a thrill a second, it is involving. The player can choose from one to five houses to connect to the single water tower and does not know his/her score until the very end. In the meantime, the player controls an active on-screen plumber who races from the water supply to the houses to the pipe factory.

Although the player has a limited amount of money and pipe to deal with, time is not a constriction. The player can leisurely examine the problem and build without a clock tightening a video noose around the plumber's neck. Because of this, *Pipes* makes for an intriguing antidote to the more frenzied games.



***As if owners of the Commodore computers weren't already software-rich, Creative Software is gearing up to provide even more games, including* Moondust *a graphic and sonic stunner.***

## *Rat Hotel*
### *Creative Software*
### *Commodore Vic-20*

Now here's a pleasant conceit. You are a rat stuck on the top floor of a seedy building. Littering the floor are pieces of cheese as well as cinder blocks, slabs, walls, and other such obstructions. Wandering purposefully around this self-same floor is Waldo, the killer custodian. If this maintenance man gets near, he can clobber you, putting an end to one of the rat's three lives. You must avoid him while eating the hunks of food that turn alternately blue, black, and pink.

Pink cheese will send you merrily on your scurrying way. Blue cheese will deliver a super charge of energy that'll help you avoid the mouse-acidal Waldo. Black cheese will poison you in place for a few precious seconds. Once an entire floor of food has been gobbled, the rat must wait for one of the two elevators which run constantly. Only after the landing has been cleared of cheese will it stop for you. The player must work down several stories to the basement, being sure not to slam into obstructions or Waldo.

*Rat Hotel* is clever and entertaining; it boasts decent graphics and imaginative sound (bashing into a cinder block creates a noise sure to set one's teeth on edge).

## *Apple Panic*
### *Creative Software*
### *Commodore Vic-20*

As *Trashman* was *Pac-Man, Apple Panic* is a streamlined version of *Space Panic,* the arcade and ColecoVision home game. Instead of digging holes and mashing aliens on the head, the pick-axe-holding player must lay traps and bean giant apples to score points and survive.

The screen shows several brick floors connected by ladders of various heights. The player must utilize strategy in order to dig holes for the enemy to fall into, without getting cornered by other errant apples. Once the fruit falls into the trap, however, the player must force it through the hole by whacking it several times in succession. Only then will it crash to the floor below and disappear.

Again, the game is annoying in its lack of originality, although Creative Software can't take sole blame. *Apple Panic* is another game licensed from Broderbund. Although both computer companies are supplying their audience with familiar fare, they are doing it by "borrowing" arcade ideas rather than acquiring the proper rights. While these rights might be too expensive for them to afford, they *could* afford to add original wrinkles that might improve the game.

## *Choplifter*
### *Creative Software*
### *Commodore VIC-20*

This is not the best of the several versions of *Choplifter;* this Commodore Vic-20 computer game is licensed from the superior Broderbund Software version. Although the graphics and gameplay are not quite as tight and certainly nowhere near as colorful as its brethren, *Choplifter* is an entertaining game in any incarnation.

The player controls the flight of a modern helicopter which takes off from its base, flies into enemy territory and picks up as many prisoners of war as it can without being blasted by satellites, bombers, and tanks. Complicating matters further are the prisons and the helicopter's capacity: the jails have to be blasted open and the chopper only seats fifteen at a time.

A tally is kept of soldiers who are rescued as well as those "killed in action" by bombs, shells or bullets. If there is any major problem with the Vic *Choplifter,* it is those bullets. The player shoots by pressing the firebutton in staccato fashion. If it is held down too long, it will turn the chopper around. That's right, firepower and direction are both controlled by the fire button, sometimes making fighting and turning a frustrating experience. ***—Richard Meyers***

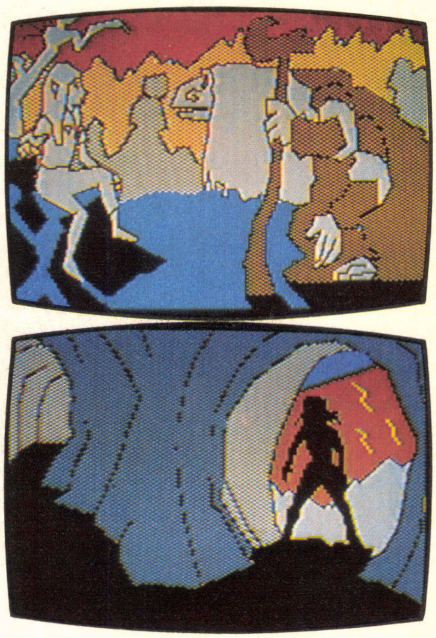
### *The Dark Crystal*
***Sierra On-Line***
***Apple II***

Although this "Hi-Res" adventure game is an adaptation of the Jim Henson movie, reading the book or seeing the movie will only help the player out of a few dilemmas; the game is different in many areas.

The player limns the role of Jen, the Gelfling charged with the task of replacing a shard of the dark crystal before the Great Conjunction of the three suns. If the player as Jen fails, evil will rule the world of *The Dark Crystal* forever.

This is an excellent family game. With each member contributing, the riddles can be solved at an accelerated rate. And on this double disk (four sides total) game, there are a wealth of riddles to be solved: who are Jen's allies, who are his enemies? How can the Skekses castle be breached? Is the crystal shard he possesses genuine?

The player must always be aware of the objects around him/her; there are items to collect and information to be gathered from the various characters, many of which will be helpful in seemingly impossible situations later. It might be useful to draw a map to help retrace your steps and to avoid known dangers. Communication with the computer is a matter of one or two word commands, and there is a good range of vocabulary.



*The Mystics can only help Jen to a point. After that Jen is on his own . . . and so is the player.*

One of the drawbacks to the adventure is the amount of time spent swapping disks and alternating sides; this happens more and more often as the adventure progresses. The reason for this is that, if Jen is killed, he must start over at an earlier point. The player should also learn to stop the game at crucial points if (s)he wants to save the game and resume at that point. This should be done just after obtaining objects or passing any event or unusual occurence.

Roberta Williams has done a superb job of translating the eerie *Dark Crystal* world to the Apple. The one hundred high resolution screens possess drama, uncanny color, superb composition and, being an all-out fantasy, some of the strangest creatures and most fantastic landscapes since Tolkien.

***—Susan Levitan***
***Jeff and Barbara Wainhause***

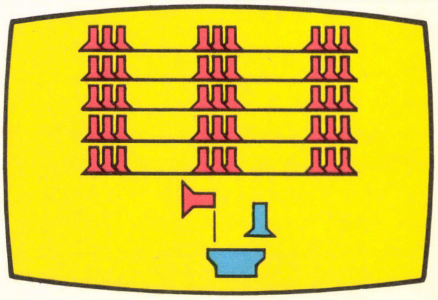
### *The Alchemist's Laboratory*
***The Real Software Co.***
***TRS-80 Color Computer***

You are in the remote mountains of Serbia. Suddenly, you stumble upon the ruins of an ancient stone castle. The walls are covered with tangled vines and multi-colored slime. In the waning daylight, you glimpse what appears to be a hidden door behind a small stand of wild brush.

The door, in an inexplicible, almost hypnotic way, beckons you. Slowly, you reach out and push it open. Through the raging din of your wildly beating heart, you're only dully aware of the eerie, creeking wail of the rust-locked hinges.

The darkness within is cloying and oppressive. Your senses scream an insane warning that you ignore as you stagger into the nightmarish pitch.

Slowly, your eyes grow accustomed to the Cimmerian gloom. You begin to perceive objects within the room about you. Off to the right, you glimpse a table with mixing bowls and beakers. To the left, a wall adorned with warped, dust-smothered shelves is almost obscured by dozens of ancient, liquid-filled vessels, locked behind sturdy lead bars.



*The alchemist's elements.*

Realization thunders upon your addled senses. You've stumbled upon a long-lost alchemist's laboratory. Here is a place of mythic enchantment. Its secrets are yours and *yours alone—if* you're clever enough to decipher them. You could leave here wealthy beyond your wildest dreams. Or—you could find yourself trapped *forever;* a pitiful, babbling *lunatic,* lost within the rat-like maze of a TRS-80 micro-chip!

*The Alchemist's Laboratory* is far more than an intriguing piece of software designed for the Radio Shack Color Computer. It fulfills an ageless childhood need to stand face to face with enchantment; to stumble upon a magical place and dabble in the wonders to be found there. Like the sorcerer's apprentice, however, players of this innovative visual adventure soon learn that it takes more than mindless experimentalism with esoteric elements to unlock the hidden wonders of alchemistic sorcery.

Simply stated, the object of this odd-ball adventure is to blend the right combination of elements which will produce the legendary Philosopher's Stone. The stone itself will then mystically transform common lead into precious gold, if the

player is sufficiently alert to find lead anywhere within the laboratory.

The game isn't as simplistic as it sounds. Quite the contrary. There are fifteen shelves. Upon each shelf rest three vials of enchanted elements. Ten of the shelves, though clearly visible, are locked behind bars, mockingly just out of reach of the player. Mixing equal amounts of those within reach (and what elements they are: Giant's Sweat, Fairy Tears, Witch's Oil and Gypsy Blood) will invariably elicit some unpredictable reaction; from bats dropping bits of precious metal or gems, to giant hands reaching out of the mixing bowl and popping the player in the nose. It's the *combination* of *results* and not the elements themselves, however, that produce the desired alchemistry, and unlock the gates to the next five shelves.

Yet, it can be wholly frustrating realizing those elusive results, since game designer Guy S. Wright is a master at coaxing the gullible down treacherously blind alleys.

Worse, as the game progresses, its scope becomes far more complex. For when the mystic gates are opened upon the second batch of five elements, they, along with the original group must be mixed, blended, stirred and shaken in the proper sequence to ascend to the third and final level of play.

*The Alchemist's Laboratory* isn't a diversion for the novice gamer. It's a cerebral journey into frustration, requiring intensive doses of concentrated labor. One almost feels a *genuine* rather than imaginary reward of lead-transformed-gold is warranted.

*The Alchemist's Laboratory* gives one a very graphic taste of the frustrations genuine alchemical sorcerers must have felt in their elusive quest to transmutate base metals into tangible wealth. A few hours with this game is more like hard work than an entertaining past-time. Yet, if you've got nothing to do for the next year or so, sit back, relax and enjoy ***—Bill DuBay***

## *Mars Cars*
### *Data Most*
### *Apple II*

*Mars Cars* is a space game in which you invade mars in an old car. No, this is not your typical space game.

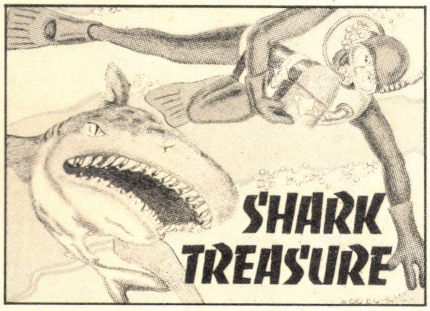
Represented by the junker, you will appear on a screen with four barrel-shaped treasures, one in each corner. Also on the screen are monsters—deadly to the touch—and a number of barriers which disappear as you touch them. In screen right center, there are two warp circles. To advance to another level, you must gather all four treasures and enter the warp circles. The creatures—Clutses, Fire Bugs, Hatchers and Kamikazes—each have their own speed and personality. Though they are dangerous, they rush about randomly. But if you spend too much time on any one screen, extra creatures will spill onto the screen, and these will stalk you.

The screen layout and creature characteristics change with each round. Levels vary from the sublimely easy to the ridiculously difficult. Only after level sixteen will you actually set tire on mars, and level sixteen is a crusher.

Though the graphics are nothing to rave about, they are effective. Gameplay is smooth but hectic. Four directional keyboard control is more useful than joystick control on this one.

Fun, witty and fastpaced, *Mars Cars* is recommended.

***—Susan Levitan***
***Jeff and Barbara Wainhause***




## *Shark Treasure*
### *Computerware*
### *Trs-80 Color Computer*

We've said it before, and it bears repeating: there's a virtual glut of software available for Radio Shack's inexpensive TRS-80 Color Computer. A lot of the programs are good. Some are exceptional. Others are simply derivative. Then there are those that aren't worth the time it takes to poke them into the computer's memory. *Shark Treasure* belongs in this latter category.

The object of this game reads like a capitalist manifesto. It's the player's obligation to accumulate as much wealth in as little time as is humanly possible, by taking risks for which there are no rational, moral or intelligent justification.

A salvage vessel lies anchored at the top of the green gamescreen. Below the immobile ship rests a boundless treasure-trove of gold bullion, presumably mired within the sandy seabed. Between the scavenger ship and its precious prey, mammoth man-eating sharks glide first to the right then to the left in an endless hypnotic trek through boredom.

The program's instruction sheet explains that a player must guide his little stick figure divers from the ship to the gold, avoiding the maws of the surly maneaters while simultaneously gathering hoards of glowing golden keep-sakes. The player must then return the pathetic little doodle we're supposed to believe is a diver to safety aboard the tiny casket at the top of the screen, which represents his ship.

In this reviewer's opinion, however, it is the game player's moral *obligation* to *feed* as many of those little stick figures to the sharks in as short a time as possible, to curtail the amount of time wasted playing this game.

If, for whatever reason, a player wishes to prolong his agony, however, he'll quickly discover that for every bar of bullion salvaged, he's awarded the ludicrous sum of $1,000. At the current market price for the precious metal, we're either to assume that these so-called bullion "bars" are a little over two ounces in weight, or that the creator of *Shark Treasure* knows as much about the world market price of commodities as he/she does about designing an entertaining computer game.

But we must, in all fairness, pay homage to the game's one redeeming feature: the sharks are brightly colored! Further, the fact that they look more like gentle blue gouramis than nasty undersea predators might actually have its advantages. Computerware can always repackage the program as the first computerized *aquarium.* Imagine! No muss, no fuss, no need to pluck out those little dead fish carcasses once a week. We knew it was only a matter of time before the computer revolution broke new frontiers on the pet horizon ***—Bill DuBay***

# ON THE SOFTWARE SIDE

***Programming in BASIC—it's as simple as 10,20,30***

*by Dale Rupert*

They named it BASIC back in the late sixties when it was first developed at Dartmouth College. It was an acronym for Beginner's All-Purpose Symbolic Instructional Code.

Today, BASIC is one of the most widely-used computer languages, and it has reached a level of sophistication which makes it suitable for applications ranging from traffic light analysis to theoretical laser studies.

While we won't be carrying this issue's examination of BASIC *quite* so far, if you've ever wondered what's involved in programming a computer, this is a good place to begin.

The idea behind programming is to tell the computer what you want it to do. We've told you in previous articles that computers really only understand 0's and 1's. Representing your ideas for the world's greatest computer program in 0's and 1's might be possible but, let's face it, a lot would be lost in translation. That's where a programming language like BASIC comes in.

A computer language allows you to express your ideas in terms of words and symbols which are familiar to *you*. The translator between you and the computer is a program which reads the statements you type into the computer. The interpreter takes your commands, translates them into 0's and 1's, and causes the computer to perform your instructions.

Each type of computer has its own version or dialect of BASIC. However there are certain commands and statements common to every BASIC.

Here's a simple program which exemplifies many of the characteristics

of programming a computer in BASIC. Never mind that it looks like gibberish: all will be clear in time.

The program is —

```
10 PRINT "I AM A COMPUTER"
20 GOTO 10
```

Note a couple of things about this program. Each line of the program has its own line number. And although the numbers must be in ascending order, there may be a numerical gap between consecutive lines so that there's room just in case other instructions have to be added later.

To make the computer follow the instructions in this program, you would perform these steps:

1) Type the first line — that is, line 10 — into the computer as shown.
2) Press the <ENTER> key to signify the end of the line.
3) Type line 20 into the computer as shown.
4) Press the <ENTER> key.
5) Type RUN and press the <ENTER> key.

Before your very eyes, and with rather blinding speed, the computer will display row after row of . . .

```
I AM A COMPUTER
I AM A COMPUTER
I AM A COMPUTER
.
.
```

ad infinitum (or ad poweroutage). What has happened?

Simple.

The first line (line 10) starts with a BASIC statement PRINT. The interpreter recognizes this as a word in its vocabulary. PRINT means display data on the video screen (BASIC had its roots in the days when most data was displayed on a Teletype machine or some other printer, hence the term PRINT). The quotation marks in line 10 are important: they tell the interpreter that whatever is within quotes is to be treated literally. Consequently, the expression I AM A COMPUTER is sent to the videoscreen.

The computer does not try to interpret the expression within the quotation marks. It merely mimics what is typed.

When the computer finishes one statement, it goes on to the next. That statement is line 20. The pseudo-English statement GOTO 10 means nothing more than "go to line 10 to get the next statement to be executed." And sure enough, the faithful computer reads line 10 to find out what to do next. Hence, this sequence is performed over and over, hundreds of times a minute.

To reiterate, the program consists of lines 10 and 20. The program is stored in the computer's memory. The computer ignores the statements in the program until the command RUN is typed. Upon receiving the RUN command, the computer performs the instructions contained in the program one after another. The purpose of the <ENTER> key is to tell the computer when we have finished typing a program line or a direct command. The computer makes no attempt to interpret what we type until it sees that the <ENTER> key has been pressed.

The <BREAK> key causes the computer to stop executing our program and to await our next command from the keyboard.

Now then, suppose we want to change the message being displayed. We could re-type line 10 with the desired message in place of the old one; for example, type 10 PRINT "I'M NOT BRIGHT BUT I'M FAST" then press the <ENTER> key. Type RUN and press <ENTER>. You will see the new message on the screen. The old line 10 has been replaced by the new line 10. Line 20 remains in the computer's memory.

***BASIC programs are comparatively slow and inefficient. The strength of BASIC lies in its interactive nature.***

One of the advantages of programming in BASIC is the fact that it is an interactive language. We have just seen how quickly we can execute a program, change it, and execute it again. The BASIC language encourages experimentation. It is, what we call in the trade "user friendly."

The BASIC language is useful for dealing with numbers as well as words. For example, this program allows the computer to determine the number of times our heart beats each day. If we type:

```
10 B = 72
20 T = B * 1440
30 PRINT T
```

and then type RUN, the computer prints out this result:

```
103680
```

Here we have introduced a very important concept in programming, the *variable.* B and T are numeric variables, chosen to signify "beat rate" and "total" although any letters could have been chosen.

In line 10, we have told the computer that B stands for the value 72. The computer treats the variable name B not as a letter but as a label for the quantity it represents. When the computer comes to line 20, it interprets the expression on the right side of the "=" as a formula to be evaluated. The computer looks into its memory to find the current value of B. It finds the number 72, since that is the value assigned in line 10. The "*" means multiplication in BASIC. So the computer multiplies 72 times 1440 with a result of 103680. This value is assigned to the variable T.

When the computer reaches line 30 which says PRINT T, the computer recognizes that T is a variable. Why? Because the T is not contained in quotation marks. Consequently, the computer looks into its memory to find the current value of T. There it finds 103680, and when we run the program that is the value printed on the screen.

(In case you're wondering what this program has to do with heartbeats per day, if there are 24 hours per day times 60 minutes per hour, that's 1440 minutes per day. The program multiplied 72 heartbeats per minute by 1440 minutes per day, dishing up 103680 heartbeats per day.)

While BASIC has many capabilities not even hinted at by these examples, we have now seen the essence of computer programming. What we *haven't* seen is how BASIC, as implemented on most microcomputers today, has statements which allow the programmer to create graphics and games — which we'll be exploring in a future issue.

BASIC is a powerful language that is easy to learn and easy to use. Programs written in BASIC are somewhat less efficient and slower running than similar programs in other languages; again, the strength of BASIC lies in its interactive nature. The programmer can quickly create, run, modify, and rerun a program.

Future articles will look at other programming languages such as Pascal, LOGO, and assembly language, assessing *their* strengths and weaknesses.

# XEVIOUS

*Continued from page 40*

player with deadly blasts. Knowledge of the oncoming terrain and a deft control of the joystick is required to survive this onslaught.

The twisting Jara rockets are not as difficult to deal with. They fly in formation downscreen and are more an obstacle to dodge than a deadly foe — though of course their mere touch will destroy the player's Solvalou ship.

Other types of flying machines include the Kapi, Terrazi and Sheonite ships. All can be dispatched with zapper fire. If they approach together, scoot your Solvalou to one side while firing, thus ridding yourself of the menace in one fell swoop.

The Bacula shields appear as slowly revolving sheets of metal. They cannot be destroyed; players must move between and around them. Since most Bacula shields travel down the middle of the screen, keeping the Solvalou to either side will allow players to stay clear of these obstacles with a minimum of effort.

The mother ship — "Andor Genesis" — can only be destroyed with fire aimed into its center. Since it never seems to run out of firepower, players must scoot into range, fire, and scoot away — all very quickly.

### *Land-Based Obstacles*

Each land-based object can only be destroyed with the blaster button. The player must line up the land target in the Solvalou's scope — otherwise a missile dispatched via blaster will miss its mark.

The Logram sphere stations are generally located in the margins of the video screen and make for easy targets. Zolback domes can come in pairs, as can Barra and Garu Barra stations. These will fire at the player's Solvalou ship, so it is necessary to quickly sight and blast them out of existence, then move away before their ejected shells reach your ship.

When these obstacles are grouped in pairs, one well-aimed blast will destroy both. Line up the Solvalou sight at the pair's mid-point, then fire.

The same trick can work on a Derota defense sight — four obstacles stationed together in a square pattern. Of course, in this case the sighting should be made dead-center between all four stations.

The Garu Derota (it's not important to memorize the names, gang, just the disposition) defense sight, on the other hand, will require individual blasts, since the objects will not be clustered together so conveniently. They appear in diagonal formation, and one blast for each is required.

Tanks known as Grobdas also require one blast each since they appear vertically on the *Xevious* dirt roads. Be wary of such vertical formations, however, since they require that the player continually move the Solvalou ship forward, pause, sight, and blast. Moving the ship forward like this will make the Solvalou an easy target for the air-based attackers, which haven't forgotten you — so don't forget them!

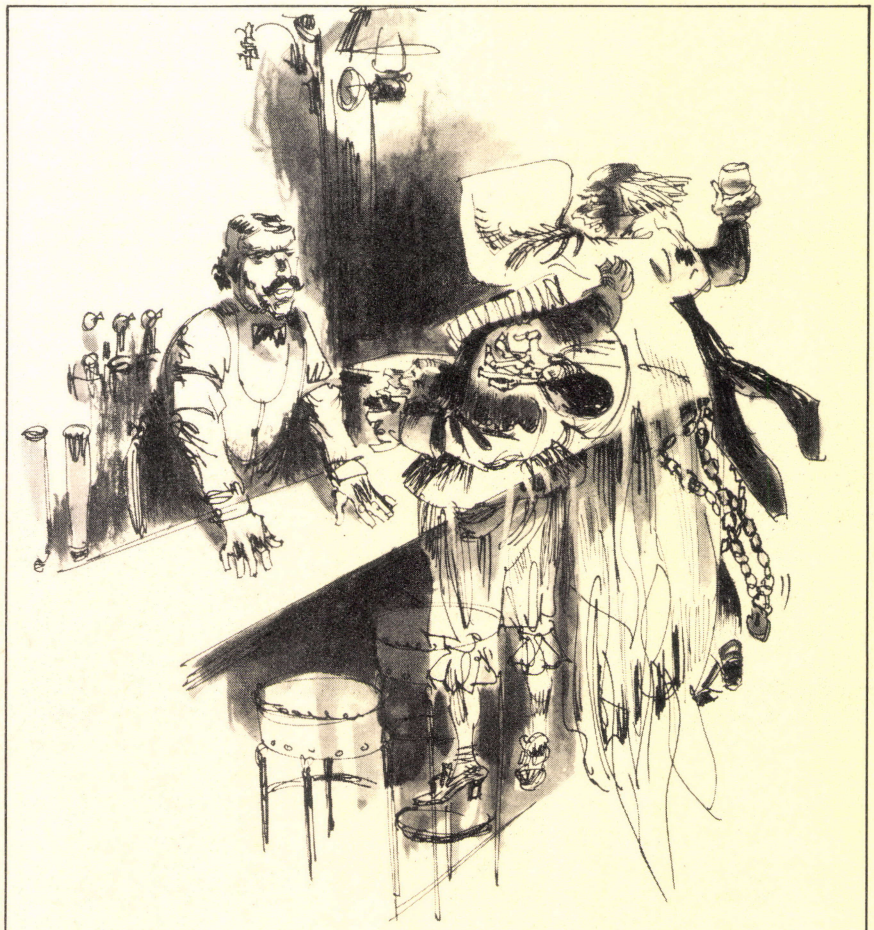
The Sol citadels, resembling pyramids seen directly from above, must be hit directly at their apex. A blast to any other portion of these structures will cause them no damage.

The Algo cannon is an overwhelming machine which, once again, must be destroyed by a dead-center blast. The cannon has five barrels; players must sight down the middle barrel in order to destroy the Algo in its entirety.

All these land-based objects are immobile, save one: the Domograms are spherical objects which move along the dirt roads. As with any other moving target, a Domogram must be led; the sighting must be made *in front of* its line of movement. Dropping a blast dead-center on the Domogram as seen through the Solvalou's sighting mechanism will only result in your missile missing its target.

Domograms can be tricky. When they reach a fork in the road, they may move either way. Always attempt to destroy the Domogram machines *before* they reach such a fork so that you won't have to guess which route **they will take. An air battle is no place for indecision.**

Domograms can suddenly reverse direction and move *backward* rather than forward. They can shift directions this way any number of times, thereby becoming difficult targets, even for seasoned *Xevious* players. As a general rule, if you can't take out a Domogram with one or two blasts, forget it and concentrate on the *other* attackers you'll be required to face. Otherwise you may *lose* face — and a game life to boot.



*Sorry, we don't serve spirits.*

# MAGNAVOX

*Continued from page 24*

*imparting a distinct motion to said hit symbol upon coincidence.*

Just how much ground was covered by this claim and others like it in Rusch's patent rapidly became apparent. When Atari launched *Pong* as its first arcade game in 1973, it was evident that the elements of Rusch's general claims ("means" for generating "hitting" and "hit" symbols, "means" for discerning their on-screen "coincidence," and the rest) were all there, a situation a lawyer would call "infringement" of Rusch's patent. Justifiably fearing legal action by Magnavox, Atari quickly moved to challenge the validity of the Rusch patent in the courts.

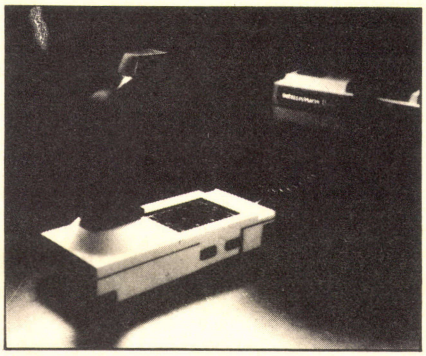
But, in the end, Atari capitulated, abandoning its lawsuit and taking a license (or, more accurately, a sublicense) under the Rusch patent.

Meanwhile, Magnavox, with its licensor, Sanders, began suing everyone in sight, manufacturers and retailers alike, for patent infringement. From 1974 on, videogaming meant bigger and bigger bucks, and Magnavox was determined to profit from the share of the market embraced by the Rusch patent. It was, by any estimate, a pretty fair share, involving some of the industry biggies, like Bally Manufacturing (producers of *Pac-Man*), Sears, Roebuck & Company, Montgomery Ward, and K-Mart.

And gradually, almost inexorably, they all anted up, one after the other, each accepting a sublicense under the Rusch patent as one of the costs of doing business—a cost, incidentally, you may be sure was passed on to consumers.

Forty-three sublicenses later, Mattel remained, virtually alone, to stand its ground against the Magnavox onslaught. Magnavox alleged that the manufacture, use, or sale of Mattel's Intellivision cartridge reader with any of six Mattel game cartridges—*NHL Hockey, NASL Soccer, Tennis, NFL Football, Major League Baseball,* and *NBA Basketball*—constituted infringement of numerous claims in the Rusch patent, including the "means for" variation reproduced above.

Forsaking any hope of having the Rusch patent declared invalid for claiming what, in effect, had already



***The new Intellivision II joystick is an ideal means for generating hit symbols and coincidence.***

been in the public domain in 1969, Mattel argued instead that its accused, microprocessor-driven games, while broadly incorporating "hitting" and "hit" symbol generators and the like, were *so* different from the kind of games envisioned by Rusch that they did not, in fact, infringe the Rusch patent.

Mattel emphasized that Rusch's system was "hard-wired," that is, it functioned in a manner wholly dependent on the way the system's components—diodes, resistors, capacitors and so on—were physically connected together. Mattel's games, in contrast, were the products of a computer-based system, the properties of which were determined by several interacting levels of software and firmware programming.

For example, Mattel had followed the general industry trend in abandoning the use of sync pulses and sawtooth signals to generate, position, and manipulate symbols within a TV raster pattern. Instead, Mattel used various digital counters, called "registers," in one or more microprocessors to keep track of symbol location during the raster scan.

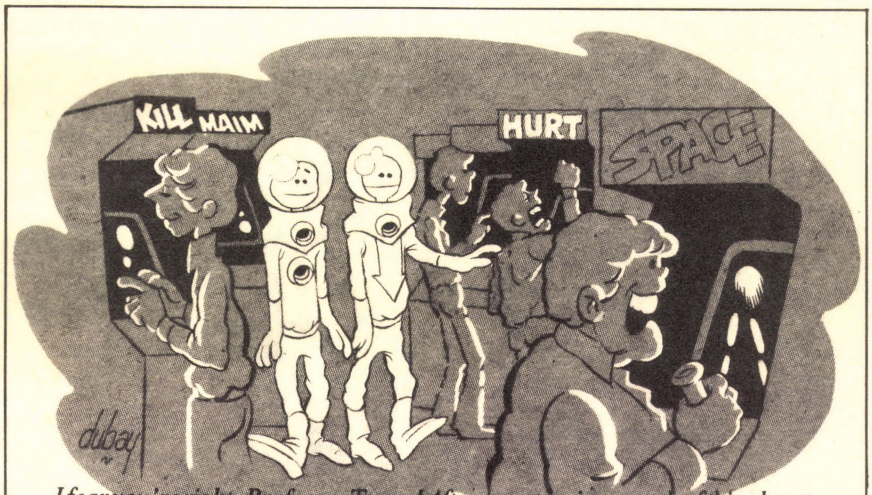
Unfortunately for Mattel, this "it just ain't the same" argument did not wash in court.

In 1982, two years after Magnavox first sued Mattel in Illinois federal court, a district court judge in Chicago concluded that Mattel's microprocessor circuitry was the functional and legal equivalent of Rusch's analog circuits, and that, in particular, Mattel's "digital counting technique" for capitalizing on the timing characteristics of the raster scan fufilled substantially the same role as the synch pulse-ramp signal procedure described in the Rusch patent.

The judge also didn't buy Mattel's contention that Mattel had avoided infringement by "following the prior art," which, translated from legalese, means doing only what everyone else was already doing before the patentee filed his application. The judge noted that Mattel's system and the "prior art," exemplified by *Space War* and the RCA pool game, shared certain features—both used digital computers of one sort or another—but the judge found the similarities outweighed by crucial differences.

With its bedrock position roundly rejected before the Illinois district court, Mattel went ahead with the motions of taking an appeal. Still, it wasn't very long before, in early 1983, the forty-fourth sublicense of the Rusch patent was tallied, with Mattel acquiescing.

It was, quite clearly, game, set, and match.




*I fear you're right, Professor Tweez! After an extensive search of this planet, we can find no intelligent life in evidence anywhere!*

# INPUT

*Continued from page 32*

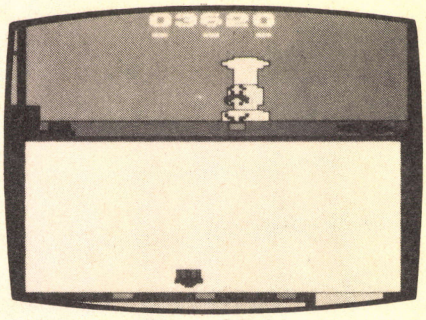
### *Shame*

It is really a shame that a home video cartridge would be criticized for being a good arcade translation. Yet that is what Jim Clark did to two ColecoVision games, *Space Fury* and *Space Panic,* in your July issue. Home videogames should be compared to their arcade counterparts but they should not be degraded because the counterpart exists. Perhaps Jim should disqualify himself when he does not like the arcade game. At the very least he should cover himself by explaining that he did not like the arcade version, as he did when he reviewed the ColecoVision version of *Gorf.* I am very happy that you have the common sense to have Ms. Meade reply to Clark's reviews. She seems to argue with him on every game.

Another complaint that I have is that Clark feels that he should judge the very necessity of a game, as in the case of the 5200 version of *Countermeasure* and again with *Space Fury* and *Space Panic.* If Clark does not like the game then he should say so. It is not his place to determine that there are enough space games or enough climbing games.

Donald Smith
El Paso, TX

*Jim Clark replies: I did not criticize the Coleco games for being good arcade translations. I did admit that I disliked* Space Fury *in the arcades and that I felt the same way toward the home variation. That is the only honest approach. I see no need to disqualify myself. As to* Space Panic, *I enjoyed the game. I recommended the game. I did go on to chide Coleco for their endless space theme games. I have been given the freedom to say what I like in these pages, and I exercised that right. Such peripheral comments in no way affect the judgement of consumers in regards to whether they should buy a game or not, they only reflect my own opinions. Take them or leave them . . . or comment on them, as you have.*



*Piece of Cake*

### *Fury of the Fledgeling*

I have a problem with Jim Clark's review of *Piece O'Cake* in your June issue. He said, "Videogamers ten and under need games to play." What makes Mr. Clark think that ten year old kids can't play good games like *Crazy Climber*? Ten years old is too old to play such a simple game as *Piece O'Cake*! Most kids I know play games like *Zaxxon, Tac-Scan, Galaxian,* and *Frogger.* No one I know plays kids' games! Jim Clark, you have made me furious! Most kids laugh at these so-called kids' games and think they're silly.

Paul Brown
Reston, VA

*Jim Clark replies: Like many adults, I am no longer surprised at the skill that many young people demonstrate with games such as the ones you mentioned, Paul. But the category 'ten and under' takes in boys* and *girls of* all *skill levels, many of whom may prefer simpler and less violent games. Those children, and their parents, should be aware of their options.*

### *Correction*

A number of our readers, including Mr. Smith (above), have quite correctly taken us to task for errors in our July issue.

We incorrectly ran a photo of an early ColecoVision prototype on the cover of our July issue, and twice more in the pages of that issue. In addition, we incorrectly identified Coleco's Super Game Module twice.

We apologize if our errors have caused either Coleco or our readers any inconvenience, confusion or embarrassment.

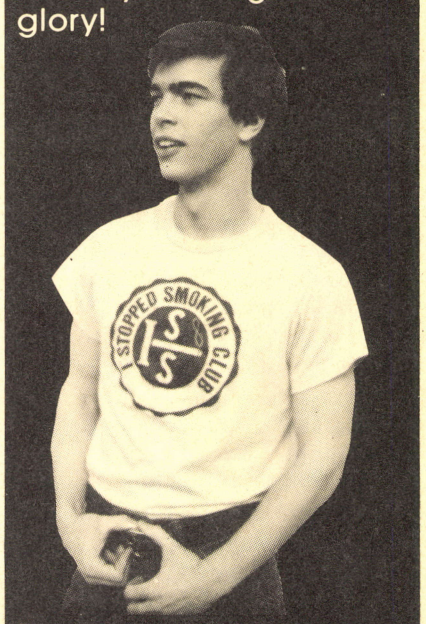
Videogaming Illustrated *welcomes correspondence from its readers. If you have any questions, comments, free-form meditations on the computer industry, or—take note!—consumer complaints having to do with software or hardware you have recently purchased, send them to Videogaming Illustrated, 45 W. 24th St., Room 407, New York, NY 10001.*


# DO IT, THEN FLAUNT IT!

You've been meaning to quit smoking for years now. You're tired of the stink, the breathlessness, the expense, the danger ... and the nagging of your loves ones.

So do it! We know it's not easy, but one thing we do know: you can't *maybe* quit or *try* to quit ... you quit. You do it.

And after you've done it, flaunt it with this colorful 50% cotton T-shirt. Cover your lungs in glory!




Please specify Small, Medium, or Large. For each T-shirt send 5.75 plus .75 postage and handling (6.50 Total) to:
I STOPPED SMOKING CLUB
225 NO. MICHIGAN AVE.
NO. MASSAPEQUA, NEW YORK
11758

# THE BOOK OF VIDEOGAME LISTS!

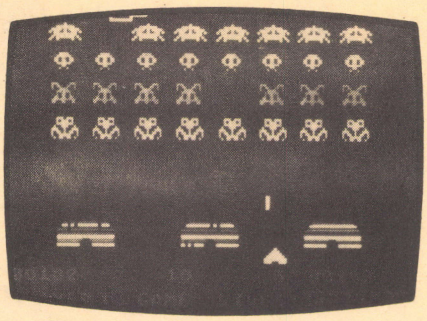
• - Indicates games of special interest or excellence.
2 - Atari 2600 5 - Atari 5200 C - ColecoVision O - Odyssey I - Intellivision

Someday a videogame will be designed that outlines the hazards of shopping for a new videogame. With a hefty thirty dollars at stake, the player will control a shopper who is reeling from friends bombarding him/her with contradictory advice, crafty salesmen trying to unload inventory, alluring packaging and boggling television commercials. To win the game, the player should steer his/her shopper to a newsstand, there to pick up a copy of *Videogaming Illustrated*.

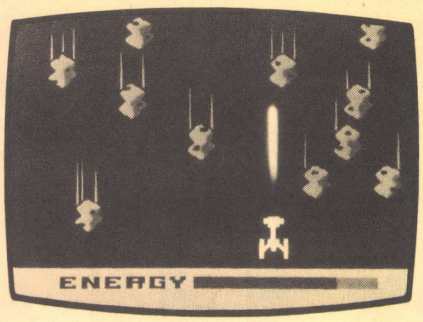
The shopper is now equipped with the latest news, the most incisive reviews. . . and the Videogame Book of Lists.

Many videogames defy classification, but most fit snugly into one or more categories; these are divided according to gameplay, theme, or the most irrelevant and frivolous categories imaginable. Players may seek out one game in each gameplay category, or they may find that one particular gameplay mode is completely satisfactory.

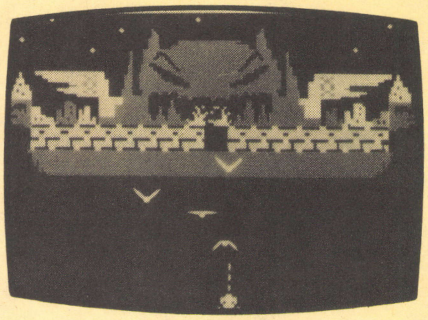
Whether you are shopping for a new game or are merely reading for pleasure, we invite you to peruse part one of The Videogame Book of Lists.



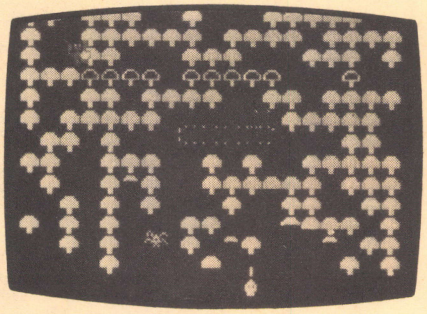
*Space Invaders*



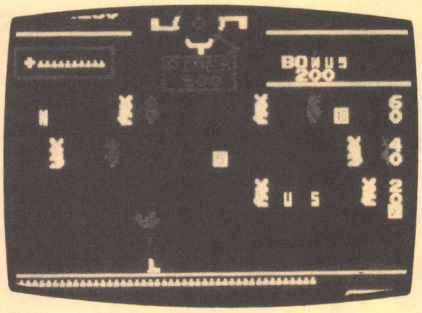

*Megamania*



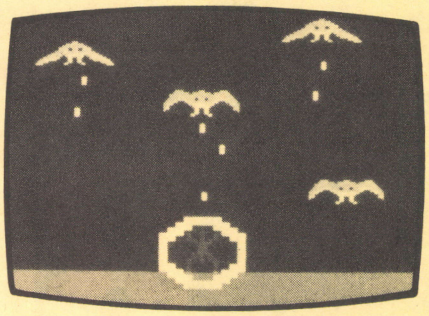
*Demon Attack*



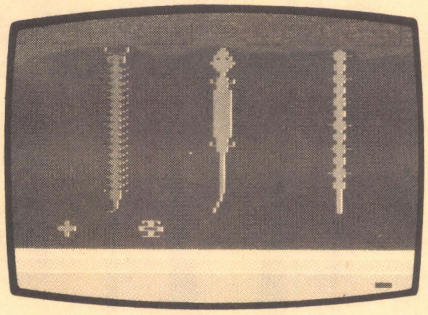
*Centipede*



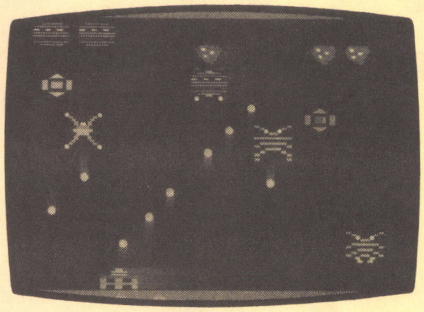

*Carnival*



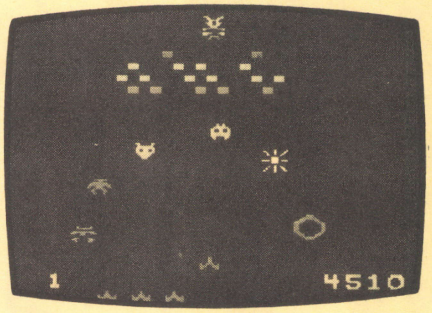
*Phoenix*



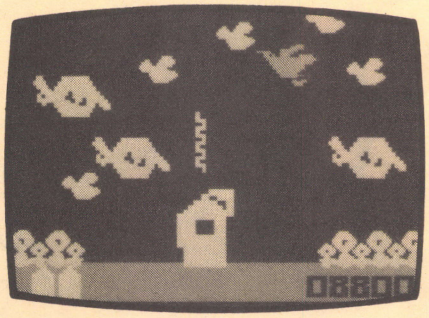
*Bugs*



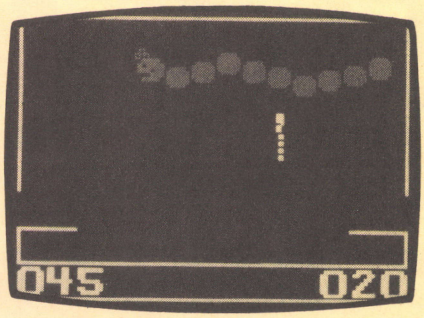
*Spider Fighter*



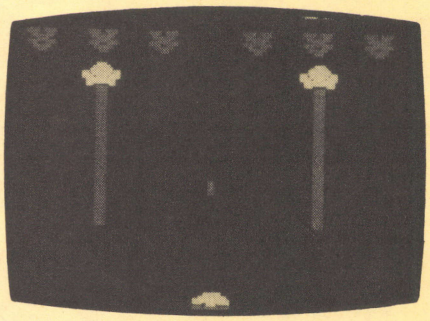

*Communist Mutants from Space*




*Buzz Bombers*



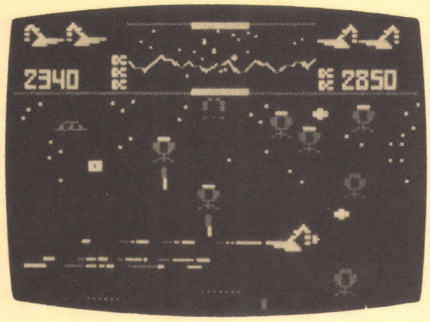

*Sid the Spellbinder*



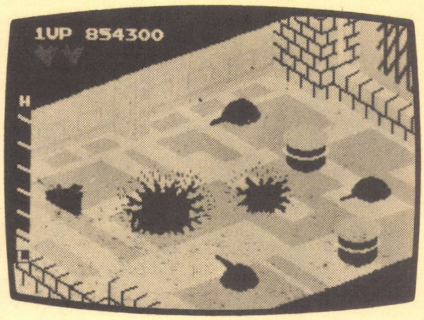
*Gorf*

# SLIDE & SHOOT

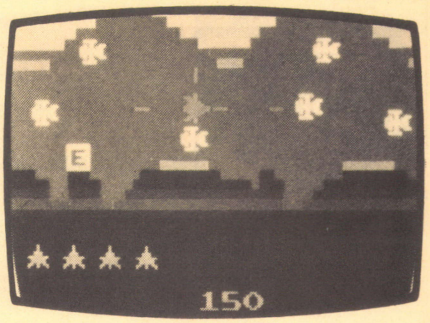
**Space Invaders** (Atari 2,5) The grandaddy.
**Astro Blast** (Mattel 2) Astrosmash adaptation.
**Bugs** (Data Age, 2) Paddle controlled.
**Communist Mutants From Space** (Starpath, 2) Supercharger required. They drop irradiated vodka.
• **Demon Attack** (Imagic 2,I,5) Demons split and strike again.
**Encounter at L-5** (Data Age. 2) Line up shots with a second cursor.
**Gorf** (CBS Games. 2,C) Sinous descent.
• **Centipede** (Atari. 5,2) unique opponents, gameplay. Frantic.
**Galaxian** (Atari. 5,2)
**Threshold** (Tigervision. 2)
**Astrosmash** (Mattel. I) Hit'em before they hit the ground.
**Space Armada** (Mattel. I) Space Invaders clone.
**Alien Invaders Plus** (Odyssey. O) Robots with shields.
**Phoenix** (Atari. 2,5) Enemies sweep and slide..
• **Megamania** (Activision. 2) Blast those bow ties!
**Solar Storm** (Imagic. 2) paddle.
• **Spider Fighter** (Activision. 2) Sinous enemies; balletic joystick required.
**Space Cavern** (Apollo. 2) Claustrophobic.
**Carnival** (Coleco. I,2,C) These ducks fight back.
**Sid the Spellbinder** (Odyssey. O) (Voice) spelling game for kids.
**Space Chase** (Apollo. 2)
**BuzzBombers** (Mattel. I) spray bees, form a honeycomb.



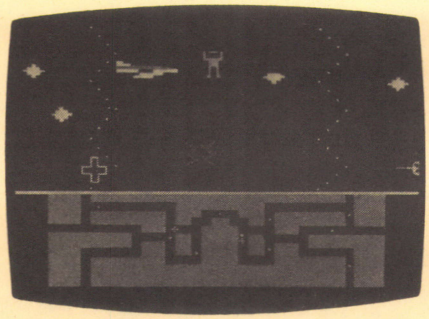

*Defender*



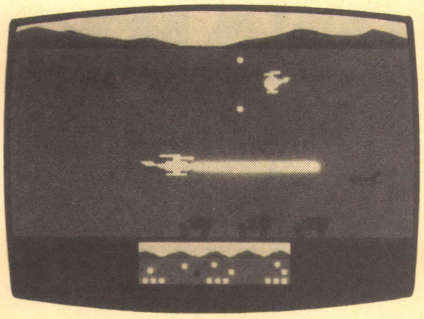

*Zaxxon*



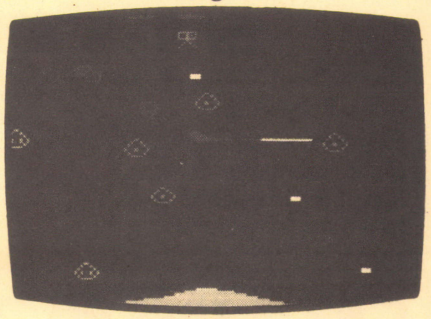

*Vanguard*



*Flash Gordon*



*Chopper Command*

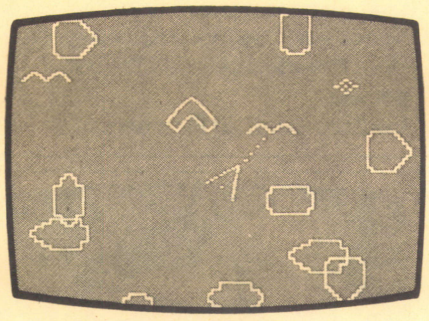


*StarGunner*

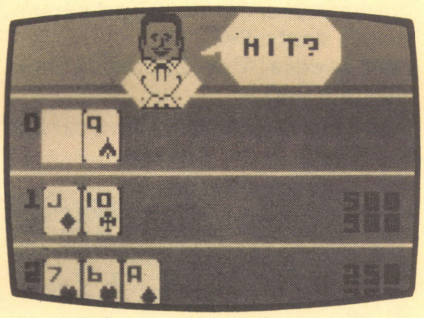
# STREAK & SHOOT

**(Horizontal Scroll)**

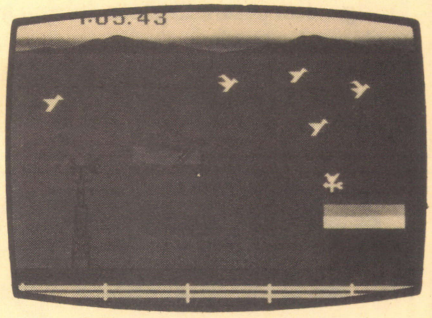
• **Defender** (Atari. 2,5) Smart bombs.
• **Chopper Command** (Activision. 2) Dual display.
**Megaforce** (Fox Games. 2) Lousy movie, decent game.
**Planet Patrol** (Spectravision. 2) Midnight action also.
**Space Jockey** (U.S. Games. 2)
**The Empire Strikes Back** (Parker Brothers. 2) Hard to bring At-At Walkers.
**Cosmic Avenger** (Coleco. C) On the ground, in the air, under the sea.
• **Zaxxon** (Coleco. C) Exception: diagonal streak.
**Bermuda Triangle** (Data Age. 2) Undersea treasure hunt.
**Seaquest** (Activision. 2) No scroll.
**Flash Gordon** (Fox Games. 2) With radar/maze screen.
**Killer Satellites** (Starpath. 2) Supercharger required.
**Vanguard** (Atari. 2,5) Constricting vertical movement
• **StarGunner** (Telesys. 2) Anti-Sphyzygi.



*Suicide Mission*




*Poker & Blackjack*



*Barnstorming*

## PIVOT & SHOOT

• **Asteroids** (Atari. 2)
**Cosmic Ark** (Imagic. 2) Sequel to *Atlantis.*
**Room of Doom** (CommaVid. 2)
• **Suicide Mission** (Starpath. 2) Requires Supercharger. Fighting Microbes
**UFO** (Odyssey. O) Ram or blast.
**Space Fury** (Coleco. C) Alien Commander critiques your skill.
**SpaceHawk** (Mattel. I) Simultaneous Competition option.
**Space War** (Atari. 2)

## GAMBLING

**Backgammon** (Mattel. I)
**Poker & Blackjack** (Mattel. I)
**Roulette** (Mattel. I)
**Las Vegas Blackjack** (Odyssey O)
**Royal Dealer** (Mattel. I)
**Casino Slot Machine** (Odyssey. O)
**Horse Racing** (Mattel. I)

**Pinball**

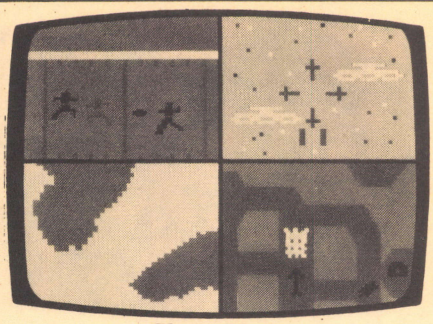
**Video Pinball** (Atari. 2)
**Pachinko** (Odyssey. O) Head to head.
**Thunderball** (Odyssey. O) paddle controlled.

## FLIGHT

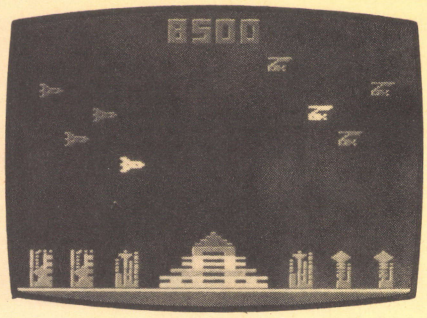
**River Raid** (Activision. 2)
**B17 Bomber** (Mattel. I) (voice)
**Skyjinks** (Activision. 2)
**Polaris** (Atari. 2) Second screen. Sub in channel view.

**Flight (cutaway view)**
**(see also Streak & Shoot)**

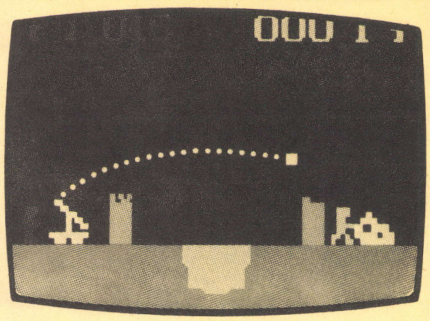
**Barnstorming** (Activision. 2)
**Triple Action** (Mattel. I) Plus racing & tanks.
**Combat** (Atari. 2) Plus tanks.
**Looping** (Coleco. C)
**Polaris** (Tigervision. 2)



*Sharp Shot*



*M.A.D.*



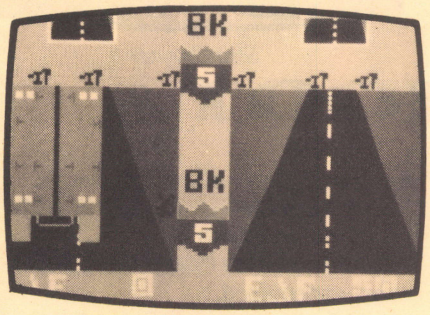
*Smithereens*

# STATIONARY SHOOT

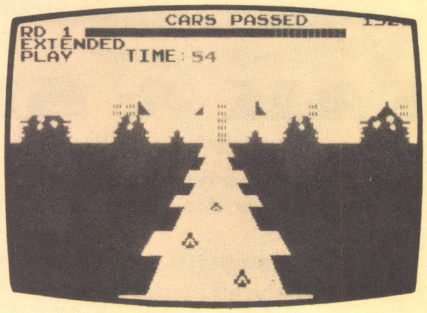
**Sharp Shot** (Mattel. I) Four variations. Very simple.
**Smithereens** (Odyssey. O) (voice) Medieval catapault assault.
**Skeetshoot** (Apollo. 2) Some rate it the worst ever.

• Missile Command (Atari. 2) Save our city!
**Robot Commando Raid** (U.S. Games. 2) Save our village!
**M.A.D.** (U.S. Games. 2) Two-player possibilities.

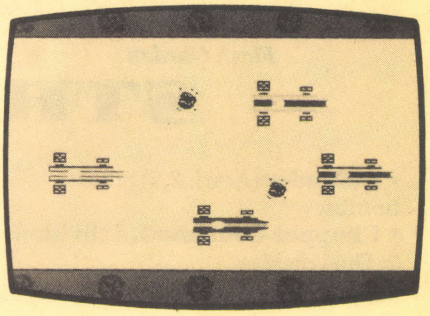
• **Atlantis** (Imagic. 2,I,5) Colorful, fast, furious.
**Air-Sea Battle** (Atari. 2) Shooting gallery format.
**Frogs and Flies** (Mattel. 2) Snare 'em with your tongue.




*Truckin'*




*Turbo*

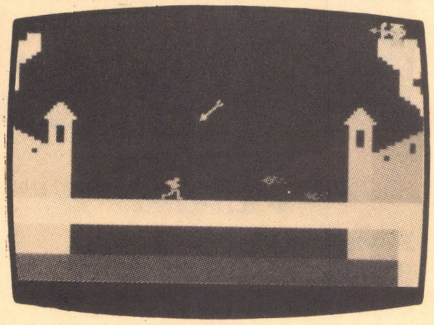


*Dragster*

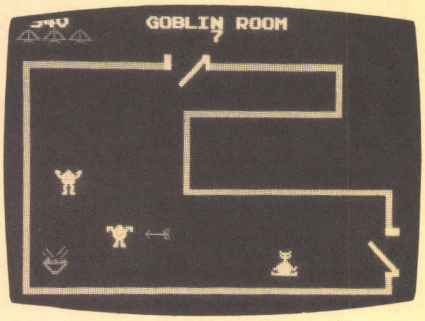
# DRIVE

**Truckin'** (Imagic. I) Haulin'.
• Turbo (Coleco. 2,C) First person.
**Dodge 'Em** (Atari. 2) Clear dots on a rectangular track.
**Dragster** (Activision. 2) Drag racing.
**Grand Prix** (Activision. 2) Timed, three lane race.

**Indy 500** (Atari. 2) Special controllers, many variations.
**Night Driver** (Atari. 2) First person, Paddle controlled.
**Slot Racers** (Atari. 2) Drive & Shoot through a maze.
**Auto Racing** (Mattel. I) Five car and course variations.
**Triple Action** (Mattel. I) Racing plus tank plane warfare.
**Speedway/Spinout** (Odyssey. O)
**Pole Position** (Atari. 5,2) First person.
**Enduro** (Atari. 2) First person.



*Dragonfire*




*Venture*

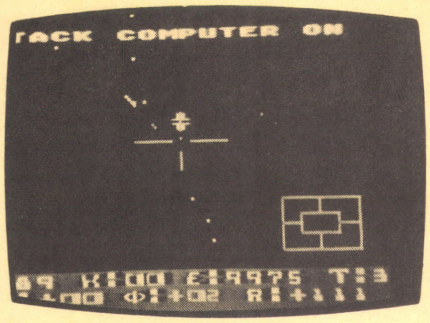
*Dungeons & Dragons*

# MYTHIC ADVENTURE

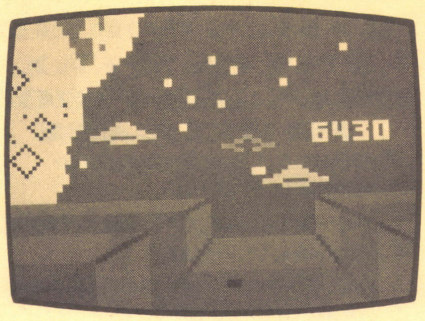
**(Dungeon & Dragons style questing)**

**Dragonstomper** (Starpath. 2) Requires supercharger.
**Advanced Dungeons & Dragons: Treasure of Tarmin** (Mattel. I) Maze view, first person view.
**Quest for the Rings** (Odyssey. O) Board game/electronic game.
**Dragonfire** (Imagic. 2,I) Treasure-guarding beastie.
**Swords and Serpents** (Imagic. I)
• **Adventure** (Atari. 2) Still a classic after all these years.

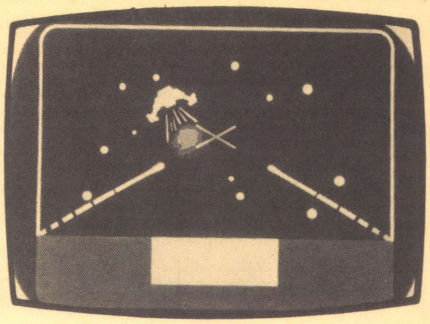
• **Venture** (Coleco. 2,C) Starring Winky.
**Earthworld** (Atari. 2) textual/electronic/complex
**Ice Trek** (Imagic. I) Multiple Screens and scrolling.



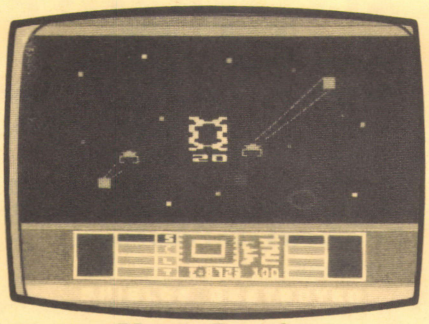

*Star Raiders*



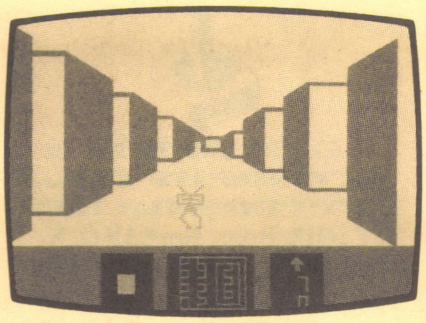

*Star Strike*



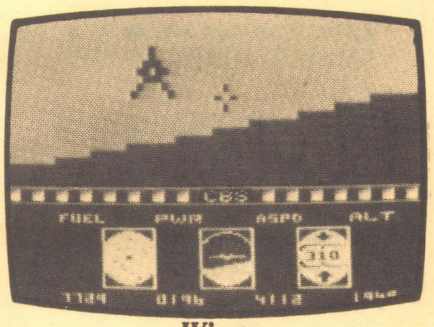
*Star Master*



*Phaser Patrol*



*Escape From the Mindmaster*

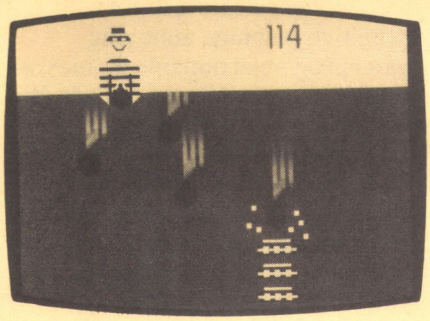



*Wings*

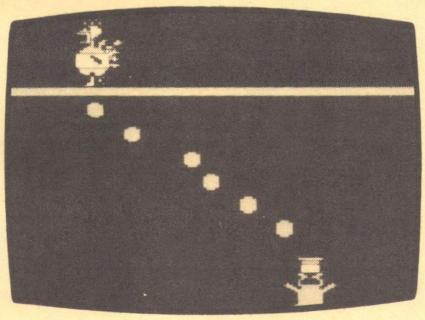
# FIRST PERSON GAMES

**The video screen is the eye of the beholder**

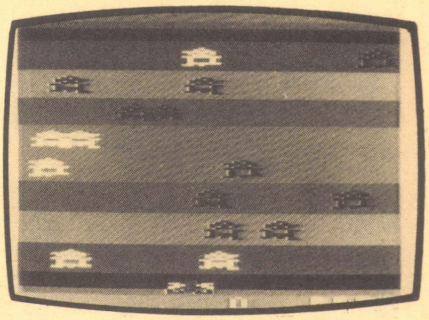
**Cross Force** (Spectravision. 2)
**Escape from the Mindmaster** (Starpath. 2) Supercharger required. Maze.
**Phaser Patrol** (Starpath. 2) Supercharger required. Space warfare.
**Star Master** (Activision. 2) Space warfare.
**Star Voyager** (Imagic. 2) Space warfare.
**Night Driver** (Atari. 2)
• **Star Raiders** (Atari. 5) Space warfare.
• **Air Raiders** (Atari. 2) Jet warfare.
**Wings** (CBS Games. 2) Jet warfare.
**Tunnel Runner** (CBS Games. 2) Maze chase.
**Turbo** (Coleco. 2,C.) Road driving
**Advanced Dungeons & Dragons: Treasure of Tarmin** (Mattel. I) Mythical questing.
**Auto Racing** (Mattel. I)
• **B-17 Bomber** (Mattel. I) (Voice)
**Sub Hunt** (Mattel. I)
**Pole Position** (Atari. 5,2) Drive
**Star Strike** (Mattel. I) Cockpit view.
**Cosmic Conflict** (Odyssey. O) Cockpit view.
**Truckin'** (Imagic.) Cross country haul
**Enduro** (Activision. 2) Road driving
**Space Spartans** (Mattel. I) (voice)
**Stellar Trak** (Sears. 2)




*Kaboom!*



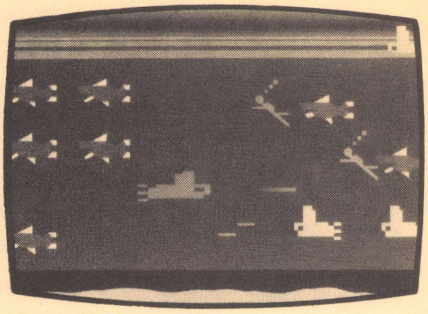
*Eggomania*



*Demons to Diamonds*

# PADDLE CONTROLLER

**Breakout** (Atari. 2) Includes Breakthru. Both are classics of the kind.
• **Super Breakout** (Atari. 5,2) Super classic of the kind.
**Bugs** (Data Age. 2) Aim and shoot an ultrasonic weapon.
**Night Driver** (Atari. 2) first person. First of its kind.
**Video Olympics** (Atari. 2) Pong and then some.
**Warlords** (Atari. 2) Medieval wall bashing.
**Encounter at L-5** (Data Age. 2) Alien invaders.
**Eggomania** (U.S. Games.) Kaboom! clone.
**Beat 'Em and Eat 'Em** (Mystique. 2) adults only.
**Lost Luggage** (Apollo. 2) conveyor belt catch.
**Demons to Diamonds** (Atari. 2) Alchemical adventure
**Solar Storm** (Imagic. 2) Slide and shoot.
**Circus Atari** (Atari. 2) Teeter-totter.
**Fireball** (Starpath. 2) Supercharger required.
• **Kaboom** (Activision. 2) Witty. Busy.



*Seaquest*

## UNDERWATER

• **Shark! Shark!** (Mattel. I) Eat or be eaten.

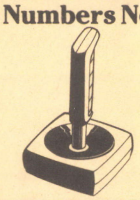
**Seaquest** (Activision. 2) Heroic rescue. Dare to be great.

• **Dolphin** (Activision. 2) Sonic cues very important. Chase game.

**Bermuda Triangle** (Data Age. 2) Streaky treasure hunt.

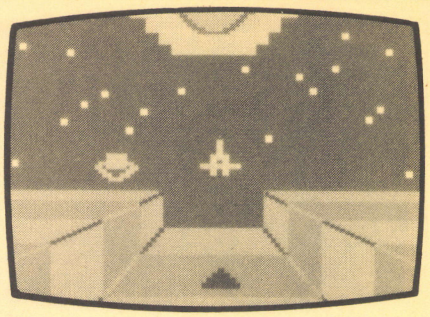
## GAMES WHOSE TITLES WERE CHANGED PRIOR TO RELEASE

**Fail Safe** to **Countermeasure**
**Squoosh** to **Wabbit**
**Escape from Argos** to **No Escape!**
**Cross Fire** to **Nexar**
**N.E.D.** (Number Education Dialogue) to **Nimble Numbers Ned**



## GAMES WITH TITLES OF FOUR LETTERS OR LESS

**E.T., QIX, Bugs, Gorf, UFO, X-Man, Oink!. M.A.D., M*A*S*H**



*Star Strike*

## ALLITERATIVE TITLES

**Beaney Bopper, Worm War I, Sharp Shot, Cosmic Conflict, Lost Luggage, King Kong, River Raid, Freedom Fighters, Dig Dug, Deadly Ducks, Star Strike, Crazy Climber, Haunted House, Planet Patrol, Pickaxe Pete, Space Spartans**

**We warned you: some lists can be frivolous. These last two will show you what we mean.**

**Readers are invited to submit their own indispensable or irrelevant lists. We will print the most amusing or helpful in a future issue. Send your lists to Book Of Lists, Ion International, 45 W. 34th St., Room 407, New York, New York 10001.**

**Next issue we will cover maze, multi-level, and unclassifiable games, sports, climbing, adventure, children's, and more nonsensical, whimsical and thematic lists. Be there and cheer.**

I tink it would be a goot game . . . if only I could see it!

## *DON'T GET MAD, GET EVEN!*

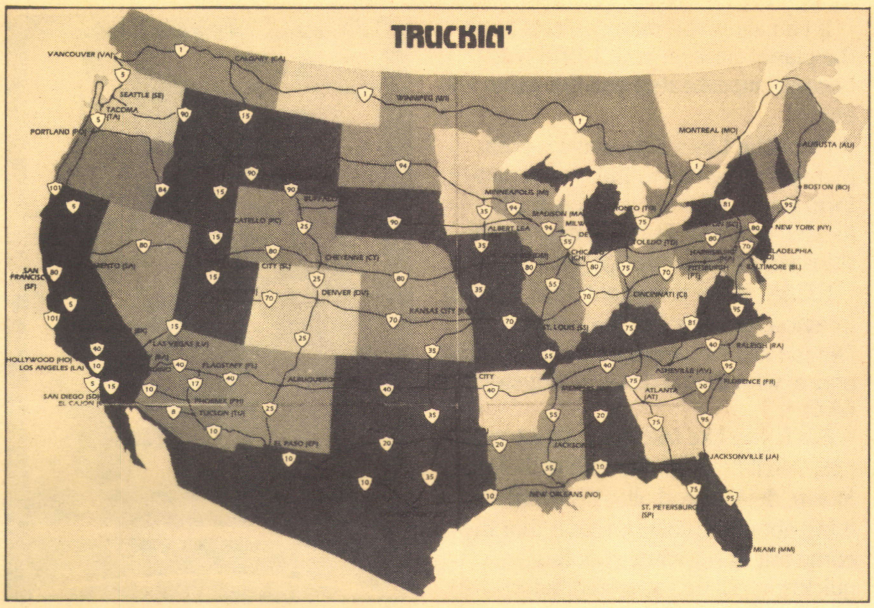
While you're compiling a frivolous or incisive list, why not let off a little steam with one more? . . . the worst video, computer, and coin-op games you've ever seen!

In a future issue, we'll be running a shattering expose on the worst games ever released, those with primitive graphics, annoying gameplay, objectionable themes, irritating sound effects and music. We would like to hear from you.

Surely you've been burned on at least one occasion. This is your chance to get even! You can submit one game title or several, but please be sure to include the reasons why you felt they were so putrid.

Also welcome are stories of incomptence, humiliation and clumsiness relating to the videogame field . . . the worst ad campaign you've ever seen, the most embarrassing defeat you've ever undergone, the most pointless peripheral product you've ever purchased or seen advertised etc. etc.

Give us your tired, your poor, and send them to Videogaming Illustrated, 45 W. 34th St., Room 407, New York, NY 10001.




**To make their game, Truckin',** ***as realistic as possible, Imagic has included a route map, inducing realistic headaches and eyestrain.***

# PREVIEW

*Continued from page 18*

the Odyssey 2 "Master Strategy" series in the sense that it's a contest of mind and patience. There's no board, but there's a detailed game map (see below), and play can go on for hours.

Action buffs will find *Truckin'* largely unsatisfying. Except for manipulating around oncoming vehicles, and occasional visits by the police—whom you can usually elude by quickly slowing down—the game is more strategy than reflex. But it certainly captures the feel of life on the open road, and there's nothing else like it on the market.

*Truckin'*, like *Bomb Squad*, is another effort to appeal to the higher age-group which owns Intellivision systems.

*Gameplay: B*
*Graphics: B*

E.C.M.: To me, there's a world of difference between complex and convoluted games. Chess is complex; *Truckin'* is convoluted. Mastering it is an accomplishment, not a pleasure. And, having learned how it works, I feel as though I've wasted my time.

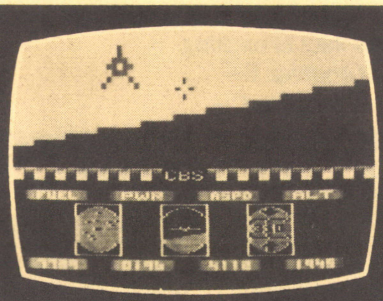
Not that this is a bad game. There are many, many variables and two players can get into some heated races. It's just that for me, the theme is prohibitively shallow. It's one thing imagining that you're a sorcerer or a knight in *Dungeons and Dragons*, characters in situations beyond the realm of possibility. It's quite another emulating the people who deliver meat to your local *Pathmark*.

It's all a matter of what you find entertaining. I like a subject with scope and adventure, and *Truckin'* ain't it. I mean, we can all get speeding tickets and run out of gas in real life; who needs a videogame for that?

If Imagic had wanted to create an adult game, a game of patience and strategy, they should have done something featuring finance and interstate politics: building snow-clogged highways, opening motel chains for truckers, etc.

Imagic has squandered some impressive programming on *Truckin'*.

*Gameplay:* C–
*Graphics:* B




***NEXT ISSUE***
***E.C. Meade and Jim Clark will be reviewing* Wings, *the new game from CBS Electronics for the Atari 2600 that incorporates the RAM Plus chip, a 12K graphic-enhancing advance.***

## *Strawberry Shortcake: Musical Match-Ups.*

***by Parker Brothers for Atari 2600***

***Object***

The citizens of Strawberryland are all mixed up, thanks to the nefarious Purple Pieman. The bodily parts of Strawberry Shortcake, Blueberry Muffin, Lime Chiffon, Huckleberry Pie, and the Purple Pieman have all been scrambled, and it's up to the player to reassemble them.

Head, torso, and legs are interchanged using the joystick. When the player thinks the body is just right, he or she hits the action button.

If right, the character's name appears and music plays. If wrong, a mixed up tune is played, consisting of bits from the theme song of each character represented.

J.C.: It seems unethical to pan a charming children's game, but in all honesty I fail to see the point of *Strawberry Shortcake: Musical Match-ups.* It doesn't teach coordination and, since the characters are all pictured inside the instruction booklet, it doesn't take much of a brain to ident ify the parts.

I can imagine four year old girls enjoying this for a few weeks—but

those five and over will find it less captivating.

The music and graphics are appealing, but that's hardly a reason to buy a videogame.

*Graphics:* C+

*Gameplay:* D

E.C.M: Parker Brothers just doesn't seem to be having too much luck with dolls, First G.I. Joe bites the bullet, now this pablum. What next, Digger the Dog?

If Parker Brothers had built in something to test a child's coordination, such as dressing the dolls or rebuilding their gazebo, that would have made sense. As it stands, this one's about as useful as a week-old *TV Guide.*

*Graphics:* C

*Gameplay:* D–

### *Solar Storm*
***by Imagic for Atari 2600***
***Object***

Your Laser Ship, located at the bottom of the screen, is attacked by all manner of Solar Debris: Deltoid, Blasters and Shield Blasters, which shoot at you; Solar Flares, Landers, Sun Spots, and Sizzloids, which do not. All destroy you upon concussion.

Your mission is to blast them out of the sky.

If you allow too many objects to hit the planet surface, your world will become superheated and the game will end.

Once the Laser Ship wave is completed, you switch to the orbital platform stage, wherein your centrally located platform fires 360 degrees at ships which pass through your space.

E.C.M.: What we've got here, folks, is Imagic's "homage" to their own *Demon Attack* sprinkled, in the second phase, with liberal doses of Odyssey's *UFO.*

But if you like fast space shoot-'em-ups, you'll have a wild time with *Solar Storm,* deja-vu and all. The wonderful thing about the solar forces is that they come out firing, some shooting so quickly you'll be vaporized before you can draw a bead. In other words, you'll spend a lot of time running. Another asset: the sound effects are the best I've heard since *Megamania.*

Personally, I'm getting tired of this genre. But there's no denying that this is a class act.

*Graphics:* B

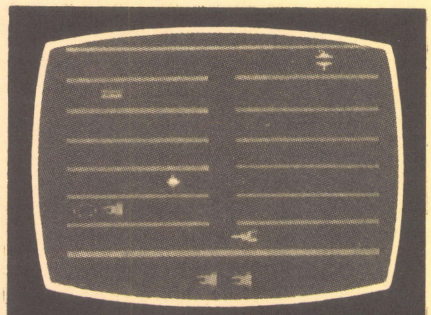
*Gameplay:* B+

J.C.: I agree that *Solar Storm* is a class act, technically, but I feel that gameplay is a shambles. In *Megamania,* the ships approach in strict, unchanging patterns and dare you to pick them off. Even in *Demon Attack,* the creatures bob at a respectable distance. But in *Solar Storm,* the enemy dares you to survive. The debris comes so fast and so randomly that luck becomes more important than talent. *Megamania* and *Demon Attack* are a measure of your abilities; this one is a measure of your nerve. I find that less than entertaining.

The space platform level is, in contrast, a plodding bore. The gun isn't nearly as mobile as in *UFO,* nor are the graphics as exciting.

*Graphics:* B–

*Gameplay:* C–



***NEXT ISSUE:***
*Our reviewers examine* Turmoil *from 20th Century Fox Games.*

### *G.I. Joe: Cobra Strike*
***by Parker Brothers for Atari 2600***
***Object***

The G.I. Joe training camp is being attacked by a giant cobra: the monster snake is trying to snare recruits by shooting them with globs of venom or sizzling them with laser beams.

You can take the part of either the G.I. Joe commander or the cobra. As the former, you must slide an atomic-powered shield back and forth over the men, protecting them, while simultaneously shooting at the cobra with missiles from the sidelines.

E.C.M.: If you've already wasted your money on this cartridge, then you know *exactly* what G.I. stands for: genuinely idiotic. Generally inept also fills the bill. Game-wise, this cartridge is somewhere between *Breakout* and *Atlantis,* without their precision play or evocative ambience.

Gameplay is a bore. Remember Telesys' wonderful *Cosmic Creeps,* where the target creatures ascended row-by-row? That's what this game needed, a sense of acceleration: Joes climbing to attack, not sliding back and forth like bon-bons on a conveyor belt.

Also nagging is the fact that the elements seem thrown together without a sense of *place*. Perspective is shot to hell, and the shields just kind of hang there. Even videogame props need a rationale to be believable, a physical creditility.

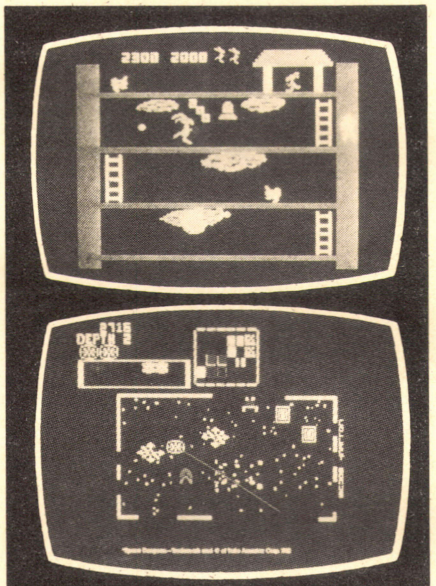
The snake looks ominous enough and slithers nicely, and the Joes are well-animated. But nice artwork does not a worthwhile cartridge make.

*Graphics:* B–
*Gameplay:* D

J.C.: E.C. is being a bit hard on *G.I. Joe*. In its faster modes, the game is quite challenging, if not original, and the abstract nature of the game didn't bother me. True, Parker Brothers could have dressed the terrain a bit more interestingly, but once things get cooking, you'll hardly notice.

This is, overall, a nice pastiche of elements you've seen before, stirred nicely in one cartridge. I wouldn't recommend spending full price on it, but *G.I. Joe* is fun to borrow overnight.

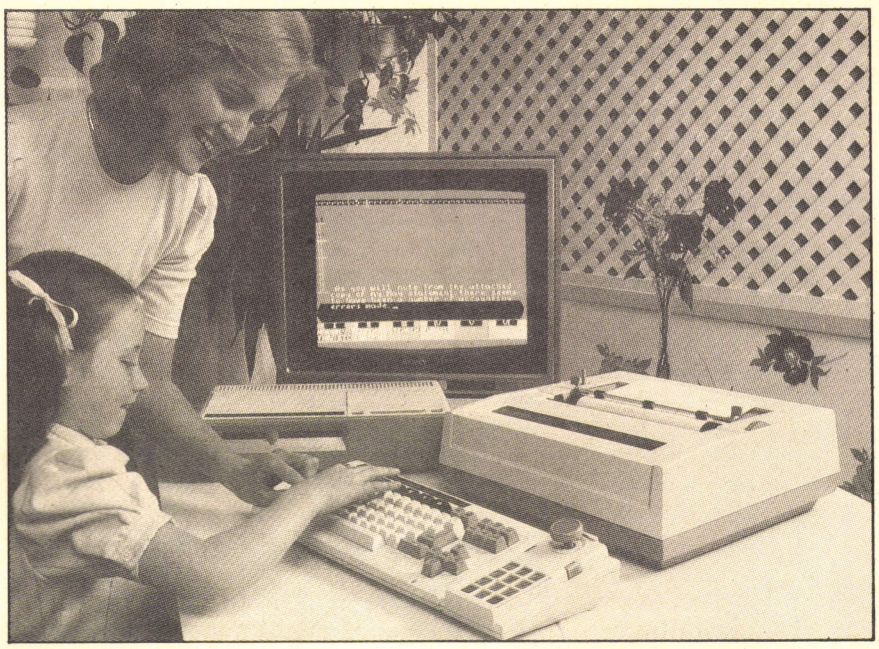
*Graphics:* B
*Gameplay:* C+



***NEXT ISSUE***

***Jim Clark and E.C. Meade will take a look at two new games from Atari for the 5200:* Kangaroo *and* Space Dungeon.**

**Kangaroo *is a multi-level adventure in the* Donkey Kong *mold, while* Space Dungeon *is a wild shoot-out. With a deadline looming, we were too late to squeeze the reviews into this issue, but advance word on* Space Dungeon *was quite enthusiastic.***



***Coleco is billing its new user-friendly Adam as a family computer. The question remains: Can Coleco deliver the software, utilities, educationals and games?***

# ADAM

*Continued from page 50*

and *Frontline*. The accent, obviously, is on arcade adaptations.

The digital datapacks, incidentally, will replace the previously announced supergame wafers, and the release of the supergame module for ColecoVision has been delayed until next year. Arnold Greenberg explains that "the drive and storage system of the supergame module and the computer are the same. And since they'll be in short supply this year, we wanted to put them all in the computer."

How is it that Coleco can deliver such an impressive-sounding system for such a low price? Arnold Greenberg: "We have achieved certain technological breakthroughs in two critical areas: the printer and the storage drive system." Greenberg says that they greatly reduced the cost of manufacturing the daisy wheel printer, but he declines to provide details.

"The second reason why we can do it," Greenberg continues, "is that the Adam system has been planned as a *system* from its creation. It does not represent a last minute effort to grab a few components off the shelf and put them together in a package and *call* them a system. The significance of the network is that you can build the individual components cheaper if you know from the beginning they're intended to work together.

"Adam is really six computers working together. There are six different processors involved. You don't have to put all the costs into each of the components as would be the case if they were sold separately." Composing the system's Fast Transfer circuitry are one processor in the keyboard, one in the printer and two in the memory console. Two more would be incorporated in the promised disk drive.

Greenberg dismisses as "harassment" claims by a California computer firm that the name 'Adam' violates their trademark. Says Greenberg, "We bought the trademark 'Adam' from a company that had a registered trademark and that had usage going back to 1973, just to make certain that we did not run into anyone coming out of the woodwork."

And how does Greenberg feel his competition will fare in the light of his comprehensive, inexpensive, and promising (though untested) system? "I think they'll have a difficult time this year. I think that in the future they will follow our direction. By that I mean that I think we are really changing the merchandising direction of this market. In the future it will all be systems-oriented."

In other, more juvenile, words: in 1983-4, you have to make a bundle to make a bundle.

## SUMMER AND SMOKE

With summer in full swing—and with space adventure movies serving as inspiration—arcade-goers will have no trouble finding new challenges, new realms to conquer.

Here are some of the games that players will soon see, have already seen, or will never see (because of the intense summer competition for arcade space):

*Star Wars* from Atari. Death to the Death Star!

*Zektor* from Sega. Defeat Moboids, Roboprobes and Zizzers to liberate eight cosmic cities.

*Gyruss* from Centuri. A twenty-three stage adventure, the player must fight his/her way home from Neptune, three billion miles distant.

*Cosmic Chasm* from Cinematronics. Blast your way through the tunnels and chasms of a space station, destroy the core, and escape before the chain-reaction explosions catch up with you.

*Zoo Keeper* from Taito. Rescue Zelda from Melvin the Monkey and contain the zoo inmates with bricks and a net. Multiple screens each present unique challenges.

*Ninja Gun* from American Arcade Specialty Company. Blast those Ninja silhouettes as they scramble over ropeways, walls, and gates of a castle.

*Moguchan* from Venture Line. As Moguchan, enter the domain of the mole men and gobble their fruit. Eat the pulsing green heart (this Moguchan is not a finicky eater apparently) and temporarily paralyze the mole men.

*Journey* from Midway. This is the first game that was adapted to the arcades from a home game, Data Age's *Journey/Escape.*

*Congo Bongo* from Sega. Brave the dangers of the jungle in this cartoon adventure game.

And speaking of cartoons, Moppet Video will be releasing a number of games designed specifically for young children—from the cabinet design to the gameplay.

Moppet cabinets will stand less than four feet high in toto. Conversion kits will ensure that games can be changed with ease.

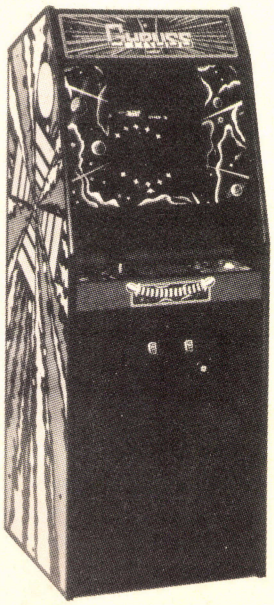
The first Moppet entry will be *Pirate Treasure.* While avoiding a pirate ship, the player must hop from island to island in search of a treasure chest.

## OUT OF POCKET

With all those new games to play, the avid arcader could lose valuable time digging into his or her pockets or running off to get more change. With two or three people converging on the same machine, the player with the quickest draw will often win.

Nicoletti Enterprises of Newport Beach, California has the answer: their Video Coin Holder will hold and dispense up to nine dollars in quarters. The VCH fits on the player's belt, and coins slide into the hand with the squeeze of a finger. The suggested retail price of the Coin Holder is $7.95.

Sounds ideal for the Laundromat as well.



## JUST DOING MY DUTY, SIR

To some, arcade games are still whooping annoyances or leeches on America's youth, but to many small businesses in the country, an arcade game can make all the difference between profit and loss. And now many colleges—and the mighty U.S. Army—are turning to arcade games to bolster revenues.

To make up a loss of nine million dollars in funding, the U.S. Army in Europe is entering the videogame business. That organization will be opening more than a hundred fifty amusement arcades to take advantage of the servicemen and their families' avid interest in the games.

In 1982 alone, arcade games in PX's in Europe earned three million dollars. According to *Variety,* the games in USAREUR Air Force Clubs, rec centers and bowling alleys earned another two million. And in the amusement centers the organization has already set up, another eight and a half million dollars were pulled in. With the hundred and fifty new centers it plans to establish, those figures should go through the roof.

But lest you fear that the game funds will go toward germ warfare research or the MX, be assured that all the money will go into morale, recreation and welfare funds.

Similarly, many student activities at colleges across the country are being funded in part by arcade games on campus.

Most colleges will not reveal the numbers, but the *New York Times* reported that Queens College in New York has earned about $281,000 from the fifty machines it sponsors in on-campus arcades. The games help fund not only student union activities, but educational programs as well. Typically, any attempt to pull the machines—or the slightest reluctance to obtain the very latest games—results in a wave of student militancy not seen since the 1960s.

Grinding their teeth all the while, deans will admit that the games are becoming indispensable while at the same time providing formidable distractions from matters academic.

## MARKET BLUR

Odyssey's long-awaited Command Center will not be released until the first half of 1984. Says Mike Staup, vice president and general manager of Odyssey, "We are convinced that the computer capability must be built in to the unit rather than as an outboarded capability as announced in December."

This may be considered a marketing setback and a costly move on Odyssey's part, but in light of what is happening in the industry, it is a shrewd move.

It was estimated that, by the end of 1982, one and a half to two million home computers were installed in American homes. By the end of 1983, that figure is expected to jump to more than six million. At the same time, according to many analysts, the supply of videogame systems has at last caught up with demand; sales of the units and game cartridges are beginning to level off. Fourth quarter losses for Atari were $18.9 million and Mattel's losses were estimated at $20.2 million (Coleco, ever the exception, was up $16.2 million). These losses are mostly due to poor cartridge sales, the very heart of the industry.

A vital statistic, this from the Wall Street firm of Sanford C. Bernstein and Co.: though videogame units are installed in only fifteen percent of American homes, they are already in forty percent of the homes with children under the age of eighteen. Examined in that light, rather than a wide open market for videogame units, the market is gradually reaching saturation level.

*Odyssey's Command Center, as pictured above and as previously conceived, will be completely redesigned.*

Seeing the writing on the wall, software companies large and small are moving into the computer software business.

This is not to imply that these are two entirely separate markets—home computers and videogame units. Both are computers of course. The distinction made is that videogame units are primarily for game playing while home computers are primarily used for information management, education and so forth.

But thus far, the distinction is blurred: videogame units are expanding their computing capability and most home computers are advertised on the basis of their gameplay capabilities. This is because, according to a Gallup poll taken in January, gameplay is still the main use that home computers are being put to. Close behind, and rising fast, are such uses as education (children's education and computer use education), business in the home, and household budgeting.

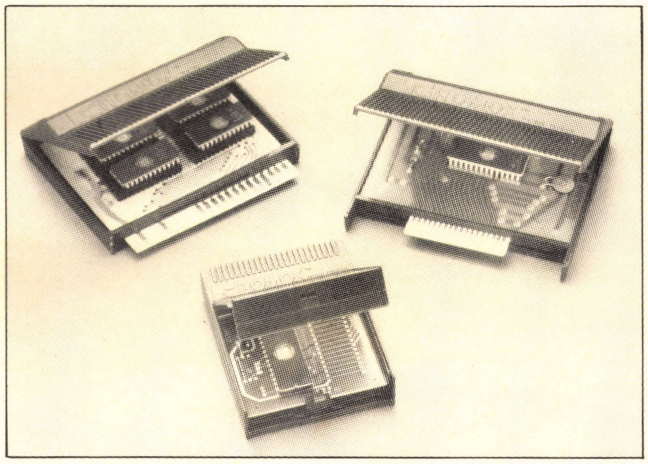
The task that faces computer manufacturers is to answer this consumer question: why should I spend X00 or X,000 dollars on a computer and break my brain learning how to use it when I can balance my checkbook with a thirty cent Bik?

So if you are entertaining a queasy feeling that the videogame unit you purchased this year will be obsolete next year, relax. All the major systems already have, or will have, computing capability. And with something like twenty million of the units installed in homes, games will continue to be created for them. Fewer games, yes. Better games? There's no way of knowing, but the smash or dud atmosphere of cartridge sales will surely make the design companies more cautious.

And computergame players—to mix metaphors—are in the catbird seat: the mountain is moving to Mohammed.

## MOUNTAIN OR MOLEHILL?

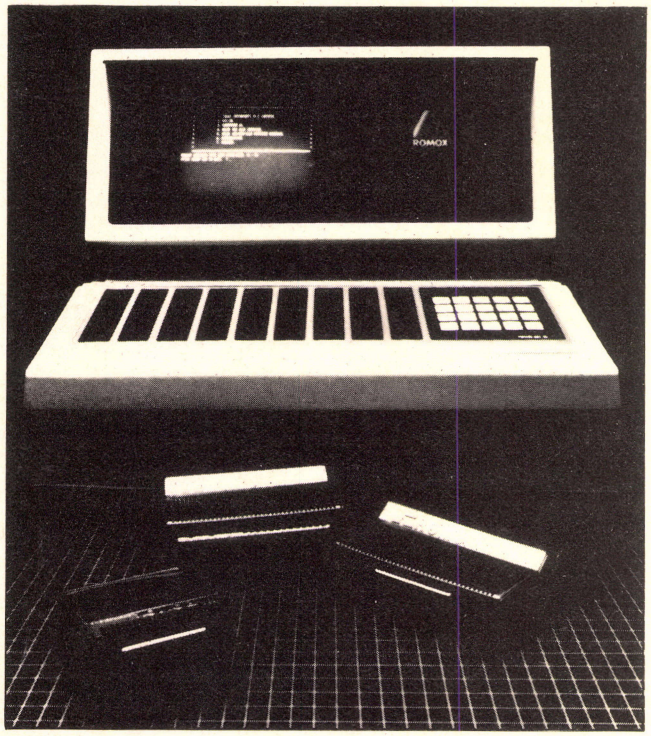
A potentially revolutionary development in this dizzying industry has been quietly announced by Romox: the Edge Connector Programmable Cartridge, or ECPC. The ECPC is the first returnable, or blank, cartridge made available to the consumer.



*Romox's ECPC cartridges bare all; they can be reprogrammed quickly by inserting them in a Programming Terminal slot.*

Rather than conventional ROM chips, the Romox ECPC cartridge contains EPROM (erasable programmable read-only memory) chips; these can be programmed in minutes without being removed from the cartridge.

Romox now produces software for the **Atari, Commodore** and **Texas Instruments** computers. They will be releasing ECPCs in those formats and a few select videogame formats such as




*All that a participating retailer need stock is the Romox Programming Terminal and a shelf or two of ECPC cartridges, and he can sell five hundred of the most popular games.*

the **Atari 2600.** Romox is in discussion with other software publishers, hoping to lure them into the system as well.

The heart of the system is the Programming Terminal, which is leased by the retailer and can contain five hundred game programs; these are sent electronically into the individual terminals from the publishers. When an ECPC is inserted into the proper format slot and a game is selected, the existing game program is erased and a new one is encoded in its place.

The computergame player can purchase one ECPC in the proper format for fifteen to thirty dollars, depending on the memory requirements. If the player doesn't like the game or grows tired of it, (s)he can have the cartridge reprogrammed for a mere one to twenty dollars.

Retailers need never fear that they will be stuck with a slew of Romox or ECPC-licensed non-sellers on their shelves: games will not be on their *shelves,* they will be contained invisibly in the terminal.

Software publishers will be provided with an instant glimpse of a new game's popularity, serving as a gauge of how many permanent cartridges of any one titled need be manufactured. And the smaller, newer game creators can sell their games on a mass market basis without the costs and headaches of manufacturing and distribution.

Like Control Video's Gameline, this is an all-new method of game distribution and a consumer benefit. And only time will tell whether software creators will respond.

## *QUARTET*

"Time will tell" is apparently not in Atari's vocabulary. Well before public response to their 1200XL could possibly be measured, Atari was developing four new computers whose release is now impending.

The Atari 600XL contains 16K RAM. A memory module, available later, will enable the 600XL to have 64K of memory. The unit has a full-stroke keyboard, four special function keys, HELP key, software cartridge slot, and a processor bus which will allow memory expansion and other peripherals.

The 600XL, which, like the other new computers, is software compatible with the 400, 800 and 1200XL, has built-in BASIC, five text modes, eleven graphic modes, 256 colors (128 possible at one time), four sound voices, TV output, two controller ports, and self-test diagnostics. It allows 320 X 192 resolution and forty column by twenty-four line text display.

The 600XL is list-priced at $199. Price-wise and otherwise, the three other computers build from there.

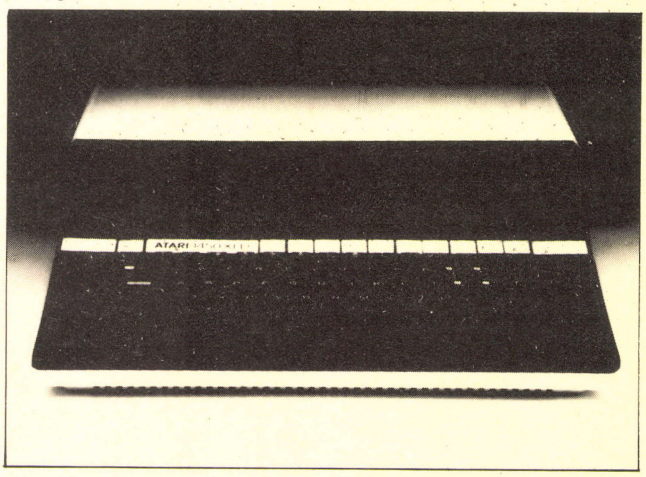
The 800XL includes all the features of the 600XL, but it is 64K capable and includes a monitor output in addition to the TV output.

The 1400XL also includes the features of the 600XL and the 800XL but it too is 64K capable, includes a monitor output, and in addition carries: four programmable function keys, a built-in, direct connect modem with a three hundred baud transmission rate and a speech synthesizer that translates text to speech with unlimited vocabulary and can be programmed directly to use phonemes.

The 1450XLD contains all of the features of the 1400XL (which contains the features of the 800XL and the 600XL), but in addition boasts a built-in double-sided dual-density disk drive and a diskette storage space.

In this issue's *Computereyes* column, Susan Levitan outlines some of the features of Atari's new peripherals that will be marketed in alliance with their new computers.

Say what you will about Atari . . . they do not play it safe.




*Atari's new computers are capability-stepped. The 1450XL is the top of the line.*

## CHARACTERS IN SEARCH OF A USER

"Our feeling is that the day of *Space Invaders* is dead," says Guy Nouri of Interactive Picture Systems in New York. "In the future, computer programs will not be so much shoot-em-ups, but activities. Learning software, not educational, but learning."

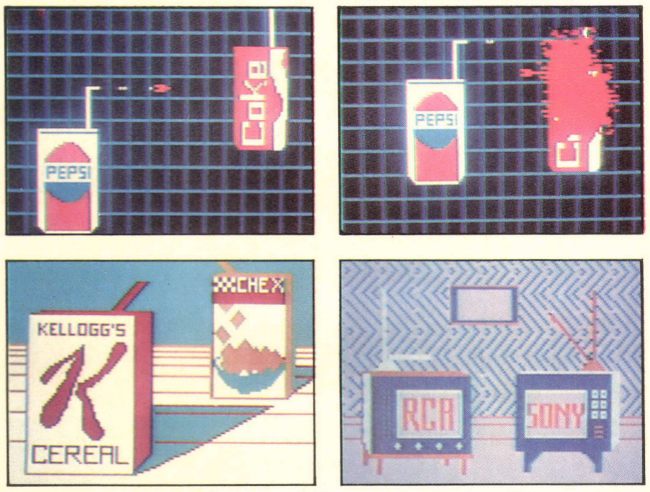
Nouri's IPS has taken a first step in that direction with *The Movie Maker,* which will soon be on the market for the 48K-capable **Atari 800.** Shortly after that, a 16K **400** version will be released, with adaptations for the **Apple, Commodore** and **IBM** computers to follow.

*The Movie Maker* is a real-time animation system that requires absolutely no programming. "It's designed to be as simple as possible to use," says Nouri. "Everything takes one or two key strokes."

The process is divided into four parts, each an individual program: compose, record, smooth, and play.

"Compose is the process in which you draw what is traditionally known as animation cels," says Nouri. "We supply characters with the disk or you can create your own. You might draw a little man, put him down, pick him up, change him slightly, put that down, change it slightly and so on until you've put together a walking sequence. The graphics seven screen is your background, the highest resolution possible on an Atari computer.

"The next step is to record. You go to the main menu, hit record, and the record program is loaded in. The shapes that you have composed are still there, intact, backgrounds too. You simply hit 'A1' ('A' for action, '1' signifies the actor you are recording). Now you move him around with the joystick, get the feel of it (you're rehearsing essentially). When you're ready, you hit the space bar, and as you move your figure around, the movement is recorded."




***The irreverent and spirited* Great Marketing Wars of the Eighties *was animated by Mary Beams on* Movie Maker. *It was a project produced by Bob Elson, Guy Nouri and Susan Rubin for Prentice-Hall Media, Inc.***

After viewing what (s)he has done, the animator can now repeat the process, adding, for example, a dog to run alongside the man. Up to six actors can be recorded in real time (the joystick process described above, play as it records) or one frame at a time.

In addition, the system contains full editing capability (rewind, fast forward, single frame step) and innumerable image processing functions: any of the four simultaneous Atari colors can be changed or inserted; screen sections can be moved, framed, duplicated, or mirrored. The animator can zoom in three levels. The illusion of panning is achieved by zooming on a closeup of the sequence's background. Any given frame can be erased, an actor's position changed, or an actor can be yanked entirely.

*The Movie Maker* also takes full advantage of Atari's unique sound chips, which are capable of four simultaneous sounds. Musical notes, continuous sounds or melodies as well as sound effects are possible. Guy Nouri lists some of the sounds developed for *The Movie Maker:* "Clarinet, whistles, train sounds, zaps, zooms, and drums. It gets kind of wild, especially when you get all four going at the same time."

Smooth is the process by which the animator compiles the animation, the background, and the sounds. All the data is condensed into a single file. The final process, play, is as if the file were a film and the computer a projector. But of course the process can be easily viewed as it develops.

Once an animation is completed, new sounds can be added or new characters, following the pre-programmed choreography, can be easily inserted.

"It's very flexible," says Nouri. "The system is built to be open-ended. There's an X key, an extra function. There's room in the program so that you can add special effects and so on. We went overboard on it. We wanted to build a landmark."

Besides the obvious leisure applications of the system, businesses can employ *The Movie Maker* to animate a trend, a process, or demonstrate the functions of new machinery. IPS has also developed *The Movie Maker Professional,* which has increased resolution and can handle up to sixteen characters. Several software developers have already licensed the system so that they can create animation for future games without coding them up, a process which normally takes several months with no guarantee that the results will be worthwhile.

And what future products does IPS have in development for the post-*Space Invaders* age? Guy Nouri reveals that they are working on a dance program, one which already contains a library of dance steps from which the user can select to arrange a sequence.

## GIVE THAT PLAYER THE PSYCHO-HOOK

In many respects, Synapse is your typical software company success story.

It began as a basement operation' a year or so ago and grew at a dizzying pace with the success of a data base program, *File Manager,* and an arcade-style adventure game, *Shamus,* both for the **Atari 400** or **800.** With the money and momentum that best-selling products provide, Synapse was free to hire more programmers, to expand its line of software and the variety of computers it was programming for.

Not quite so typical is Synapse's president, Ihor Wolosenko. As Synapse spokesman Paul Magier reveals, "Ihor Wolosenko's background is in psychology and therapy. Working one on one with every programmer on every game, he develops games that are not only exciting and graphically appealing, but also more emotionally compelling than the run of games that are available."

What Wolosenko is looking for, according to Magier, is a psychological hook in each Synapse game. Magier cites the player-controlled character in *Pharoah's Curse* as an example: "If you were to move him in the middle of the room and leave him there, he wouldn't just stand there. After a couple of seconds he would move back and forth from one foot to another, wave his arms at you, make noises. He would try to get your attention back."

Wolosenko's hooks are more than mere 'extras' that add appeal to a game; they extend to overall gameplay and design. Says Magier, "Another thing we've done, which no one else has tried before, is what we call the multi-player cooperative game. One is called *Survivor.* Anywhere from one to four players can play simultaneously, and they don't play against one another, they play cooperatively, each controlling one ship function."

The second game in this multi-player cooperative series is called *Shadow World,* in which two players control separate vehicles. They patrol the earth's surface, protecting it from vicious alien seed pods. Each player has his/her own screen until they arrive in the same location, at which time the two screens become one.

Synapse designers have come up with an additional hook, a visual one, that, according to Magier, "we don't have a name for yet. The background scrolls in a three dimensional fashion, which accomplishes what the computer version of *Zaxxon* set out to do but, in our estimation, failed. It will probably become a standard by which people will judge graphics."

The two Synapse games that exploit this scrolling technique are *Dimension X,* an action war game in which the player controls a tank, and *Blue Max,* a WW I aerial combat game in which the player controls a biplane.

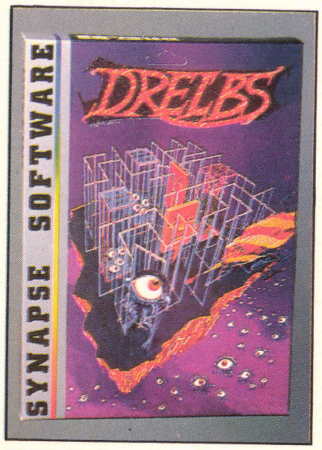
Additional new releases from Synapse include:

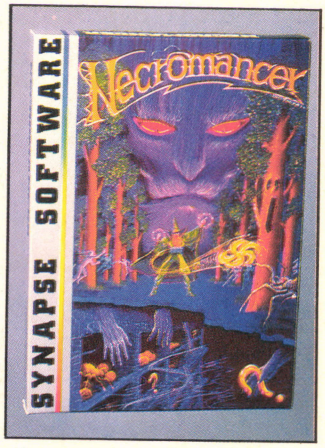
*Necromancer.* The player controls a wizard who is trying to restore the world after an evil wizard has cursed it. The player plants a tree in the first screen and (s)he must protect it from the evil one's trolls. If the tree thrives, the player plants another and another until there grows a forest. Cast a further spell, and the trees come to life, sprouting arms legs and faces—an instant army. Much more action follows.

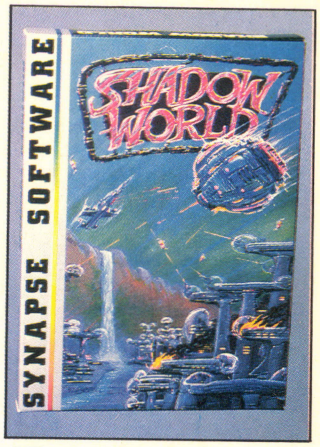
*Drelbs.* A drelb is a little eye with feet running along a grid, trying to gain territory and avoid monsters. Every now and then, a window appears and opens—a window to another universe.

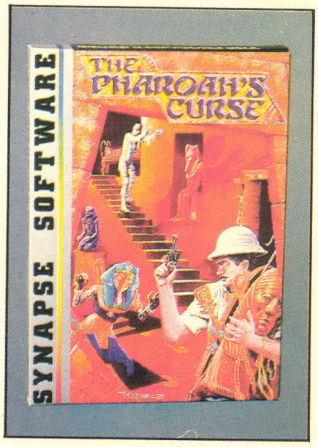
*Shamus, Case Two.* Again involving Shamus and the Shadow, *Case Two's* action is set outdoors this time, with Shamus pursuing his adversary over buildings and through alleys. Shadow employs snakes and attack birds to do his dirty work rather than simple hitmen. Since *Case Two* is faster and more complex, a map is provided the player when (s)he hits the space bar.

Paul Magier reveals that Synapse has hired six new designers who do nothing but convert games from their customary Atari 400/800 formats to those of the **Commodore 64** and **Vic 20, Apple, IBM-PC** and the **TRS-80** computers.



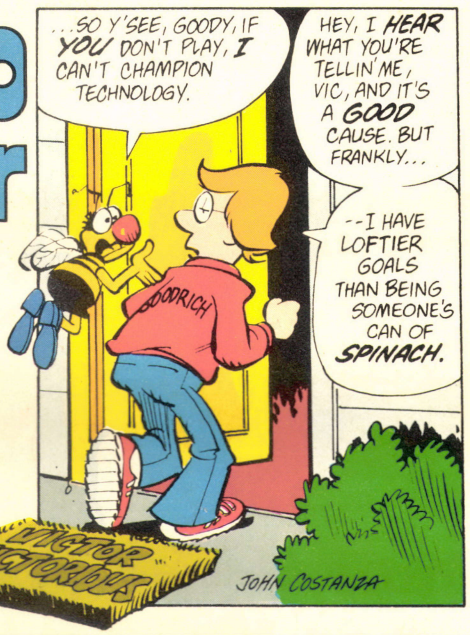



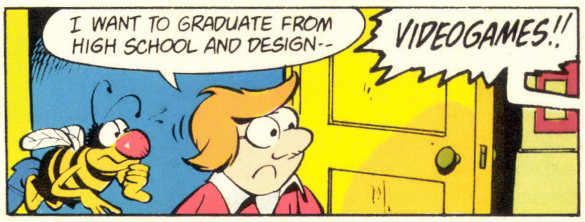



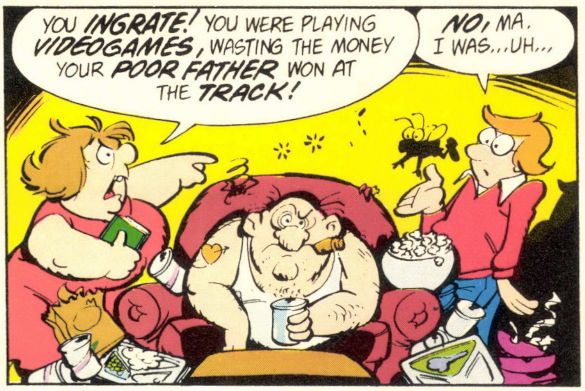

*With their multi-player cooperative games such as* Survivor *and* Shadow World, *Synapse hopes to encourage players to interact with one another, communicate and cooperate rather than isolate themselves with their computer.*

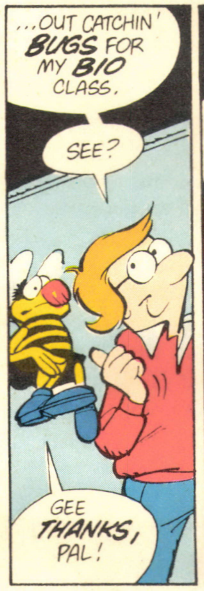
# video victor

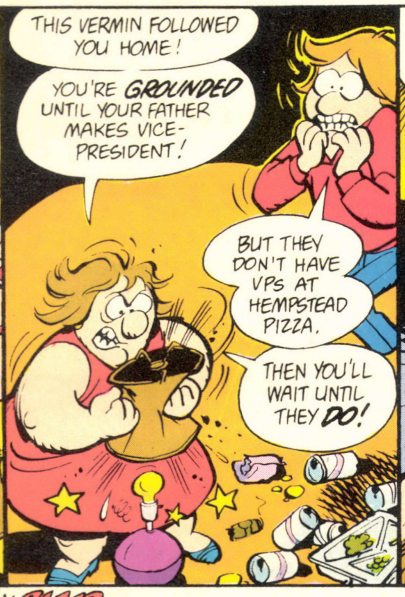
HAVING SURVIVED A RUTHLESS ATTACK ON THE LOCAL ARCADE, VICTOR BUMBLE AND HIS ALLY "GOODY" GOODRICH FIND THEMSELVES AT ODDS! ONLY A MIRACLE CAN POSSIBLY MAKE...

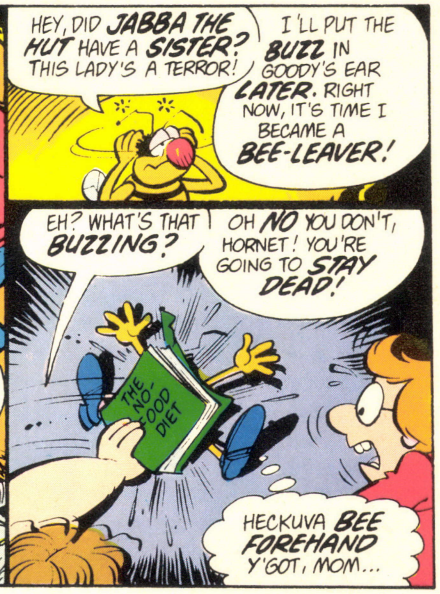


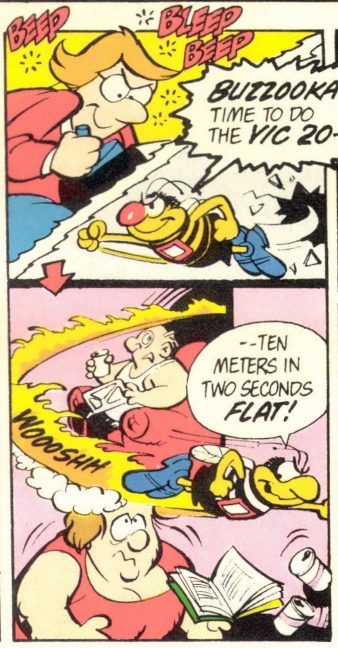



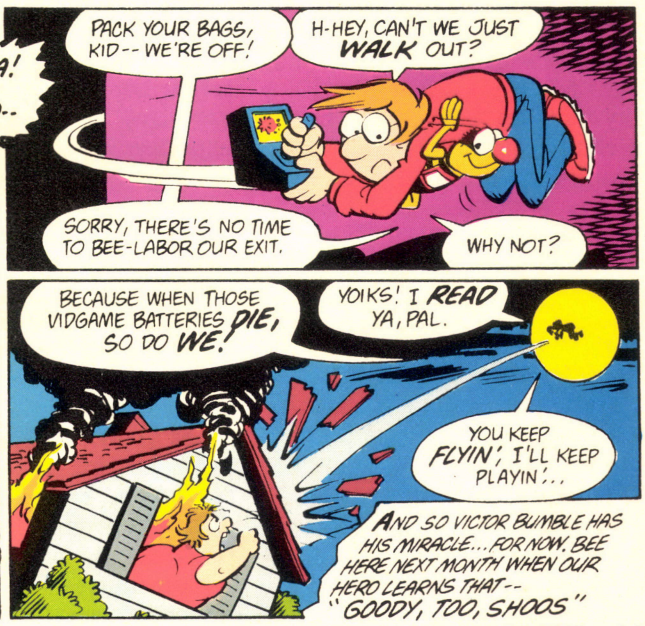








*Written by Jeff Rovin/Art by John Costanza*

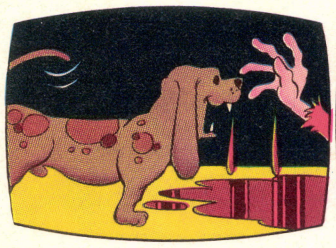
# You Read It Here First!

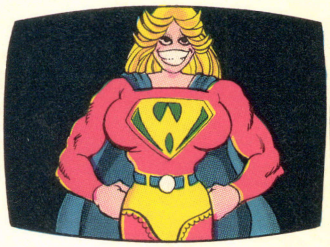
In the infant stages of the videogame era, there existed the possibility that game designers would become the industry's superstars. A game's author would have his/her name above the title, or at least very closely identified with current and upcoming games.

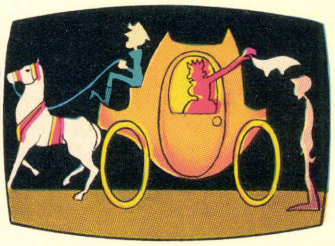
It isn't working out that way, for a number of reasons. But we wondered: if game designers *were* to become superstars, would the software companies try to attract famous novelists to Silicon Valley, much in the way that Hollywood lures them with jacuzzis, megabucks, megameetings and mellow vibes?

We wondered further: if bestselling or esteemed novelists *did* design games, what would the games be like?

Listed below are nonexistent games that our staff dreamed up with famous novelists in mind. Remember, readers (and authors in question), it's all make believe! The novelists named herein were never consulted, and no blame should be attached to them.







### *Winky by Stephen King*

The player cannot win this game. Gameplay involves postponing the inevitable.

An evil power as old as the big bang, as overpowering as cheap perfume and as mysterious as a 1040 form has emerged from the bowels of hell and set up shop in the sleepy town of Peester, Maine. It has taken possession of Winky, a little dachsund owned by Tommy. The player, controlling Tommy, must pursue the devil dog as it scoots through the town, running under the legs of the townsfolk and causing them to fall under oncoming cars, down stairs, into electric fans, metal presses, paper shredders, power mowers, and vats of boiling oil. When all the others are dead—the player cannot prevent this, try as (s)he might—Winky turns on Tommy and bites little chunks out of him for hours of relentess and remorseless gameplay, until there is nothing left on the screen but the dachsund, leering with bloodied muzzle.

### *The Commonsense Vanishment by Robert Ludlum*

In *Asteroids*-style gameplay, the player, taking the role of a hard-bitten, world-weary agent, must blast every object (s)he sees . . . enemy agents, shopkeepers, women, children, trees, dogs. It's a dirty game, but someone has to play it.

### *Narcissa's Whim by Judith Krantz*

The player controls Narcissa and directs her from bedroom to boardroom across three continents.

As in the *Dungeons & Dragons* mode, the player selects from a menu the various facets of Narcissa's body and soul: her incredible facial beauty, suggesting a titled countess and a dockside tramp at the same time; her voluptuous body, strong and athletic and yet soft and pliant; her ruthless will to dominate and acquire, torn by her desire for home and family as well as her sympathy for the sufferings of those not as fortunate as herself; her keen intelligence, always one hundred steps ahead of her adversaries; her Bryn Mawr and Harvard Law School education; her expertise in all fine arts and skill in all sports; her sexual prowess, gourmet cooking abilities, photographic memory, wisdom, ultra-sophistication and her girlish, unpredictable ways.

Selecting any or all of these traits, which are in such abundance that they never run out, the player guides Naracissa through a series of screens—corporate takeovers, empire building, foreign revolutions, political campaigns, state functions and the wooing of European monarchs—until Narcissa is named Queen of the Earth and Goddess of the Universe.

### *Love's Heaving Hickey by Barbara Cartland*

You try to control the beautiful and winsome Cotrice; you try, but life is *so* bewildering. You are riding in your coach with your governess, the spinster Lady Sagg, on your way to Howley Manor, there to suffer the attentions of Count Howley, the handsome yet intolerably cruel man to whom you are betrothed. It is impossible, simply impossible, for you to truly love him. On this account, Lady Sagg has agreed that, if you can find someone who is Howley's equal in title and fortune, you may wed that person and not Howley

Gameplay involves dropping scented handkerchiefs out the coach lattice to the to the strangely compelling figures that line the roadside. Counts, Dukes, and Earls co-mingle with kindly woodsmen, farmers and slop jockeys. As Cotrice, you have but a moment to decide to drop a hanky or not.

Once a suitor retrieves your handkerchief, the screen changes to a maze. Here, the suitor's title and yearly endowment are displayed, and you must find a way, if he is suitable, to truly love him through a complex labyrinth of your secret desires, fears, stormy moods and the scars of your unloved past. If he *is* suitable and you *can* love him, you fall into one another's arms and swim in a sea of bliss while Lady Sagg taps the enraged Count Howley on the nose with her fan.

Ion International presents:

# SHARKS

THE MAGAZINE OF DEATH IN THE DEEP SEA!

Exciting never-before-seen photos!

Why sharks don't die!

Shark killers for killer sharks!

The twenty great maneaters!

ON SALE NOW!

Gentlemen:
Please send me _____ copies of SHARKS. I enclose $2.25 ($2.75 in Canada and elsewhere) for each copy plus fifty cents postage and handling.

Name _____

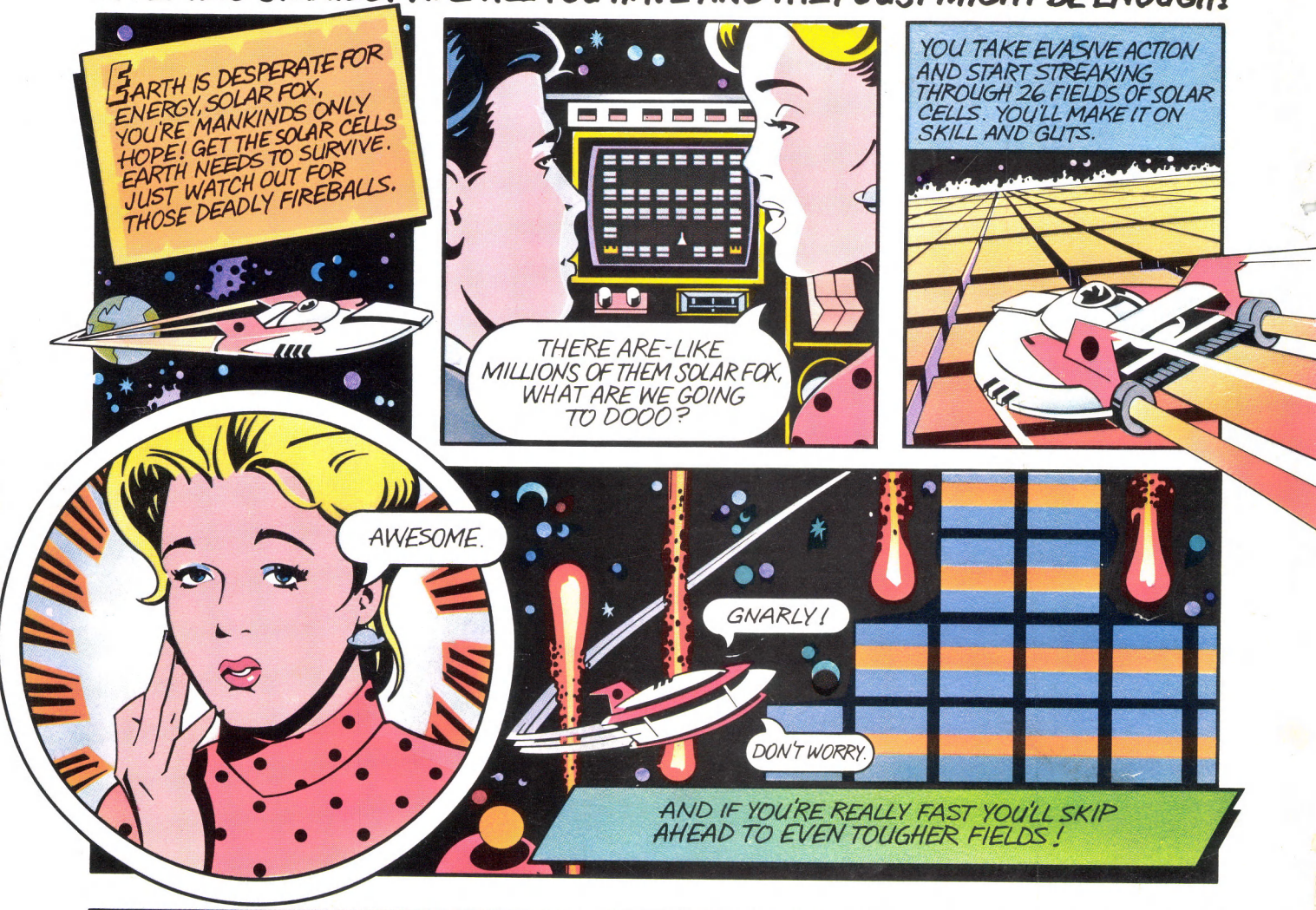
Address _____

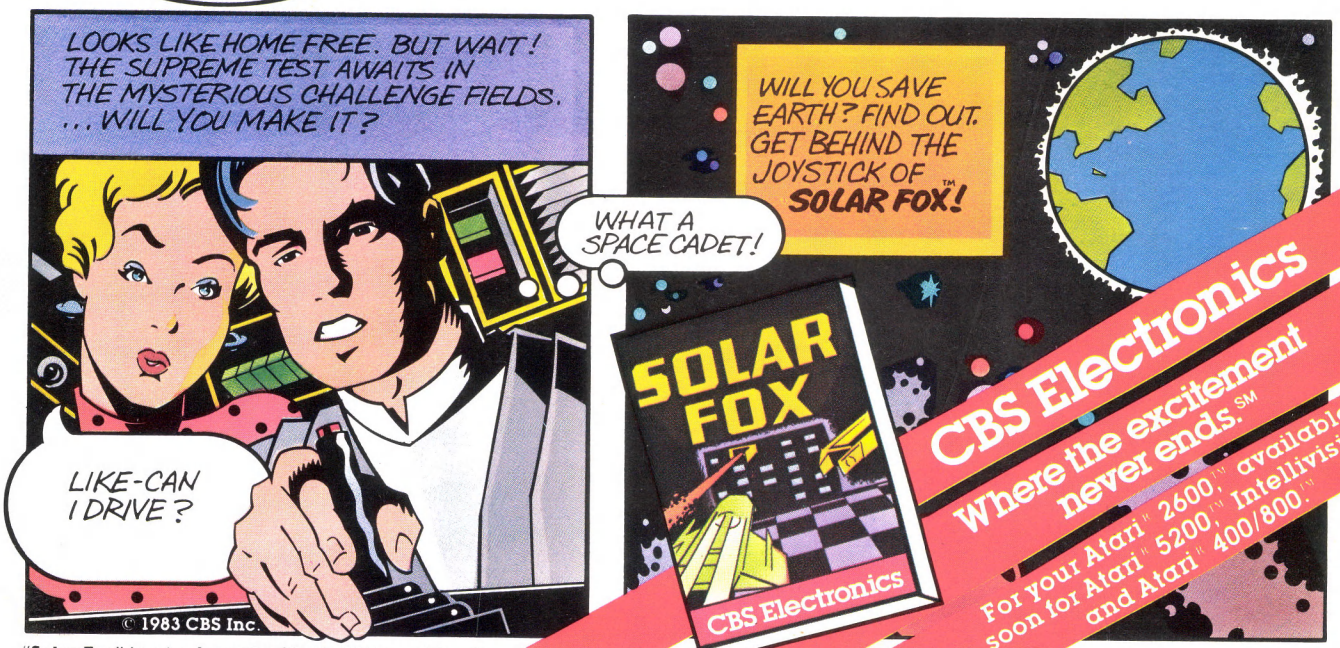
City _____ State _____ Zip _____

Send to: Ion International, 45W. 34th St., Room 407, New York, N.Y. 10001

# SOLAR FOX™

**SPEED AND STRATEGY ARE ALL YOU HAVE AND THEY JUST MIGHT BE ENOUGH!**




© 1983 CBS Inc.

**CBS Electronics**

**Where the excitement never ends.℠**

For your Atari® 2600,™ available soon for Atari® 5200,™ Intellivision® and Atari® 400/800.™

"Solar Fox" is a trademark of Bally/Midway Mfg. Co.
"Atari," "Atari 2600," "Atari 5200" and "Atari 400/800" are trademarks of Atari, Inc.
"Intellivision" is a trademark of Mattel, Inc.